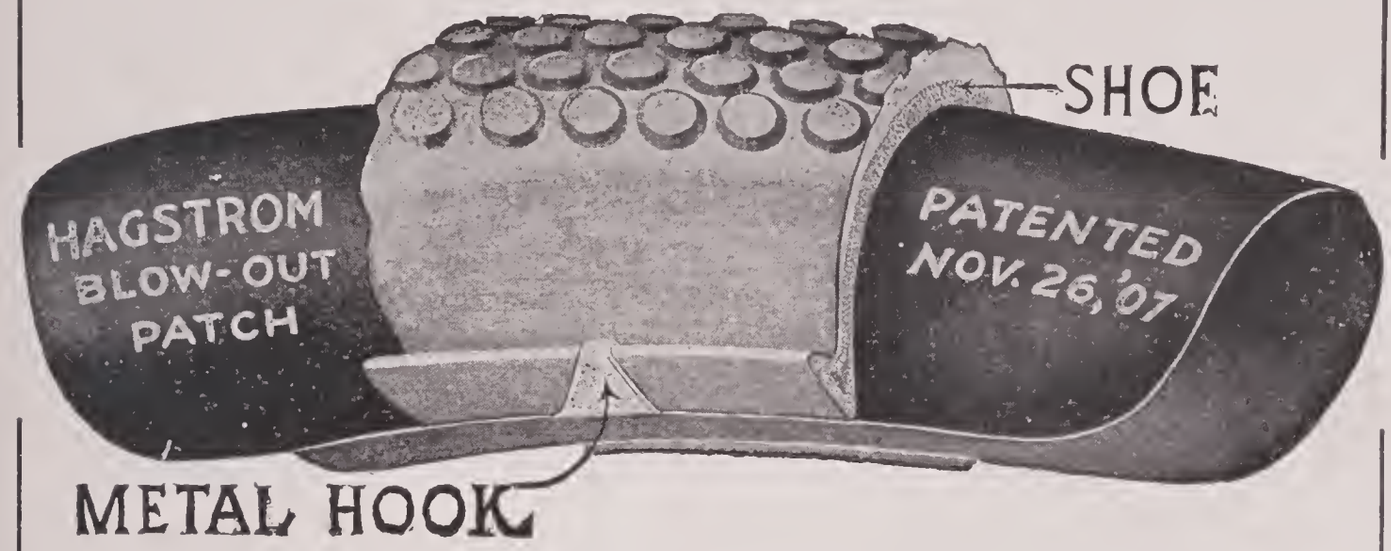
GV
1024
.P47
V. 2

THE LIBRARY OF CONGRESS

THE LIBRARY OF CONGRESS

# Go ahead in safety




WHEN you carry HAGSTROM INSIDE TIRE SLEEVES in your tool box there is no need of carrying extra casings. The Hagstrom Sleeve fills the bill. They do not disfigure your car and, once inserted in the tires, will last thousands of miles; they positively can not creep and will build up the weak spots; saves vulcanizing, if applied in time, prevents rim cuts and blow outs; easy to insert and will save a large per cent of your tire expense. The Hagstrom Tire Sleeves are the greatest sensation of the season in the auto-tire accessory line, and is the only sleeve that has the endorsement of

*our leading motorists and racing men.*

Workmanship and material are carefully selected. The Hagstrom Sleeves are put up in boxes, making them convenient to carry. Ask your dealer. On sale everywhere.

HAGSTROM BROS. MANUFACTURING CO.

Works and Main Office

LINDSBORG, KANSAS

# Do You Wonder that the Splitdorf Product Leads the World?

The Most Marvelous Non-Stop Automobile Run Ever Made—**10,000 miles without stopping its engine recently accomplished by a Maxwell car equipped with a**

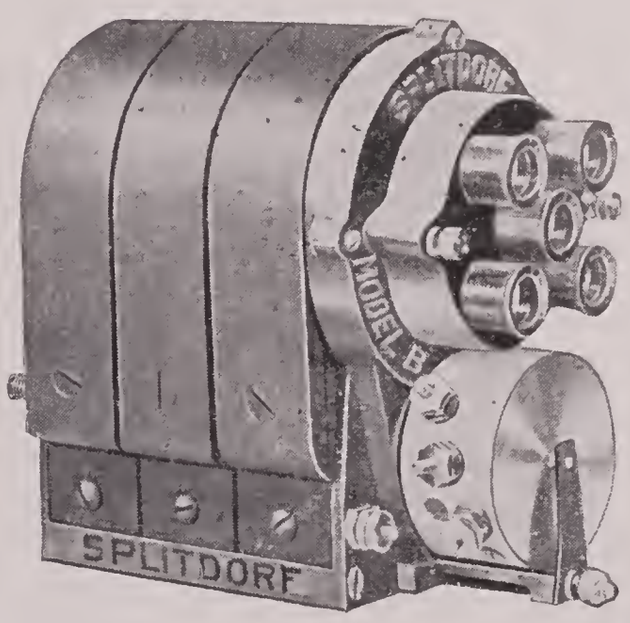
# SPLITDORF MAGNETO

*AND*

# COMMON SENSE PLUGS

Magneto and Plugs gave absolutely perfect ignition during entire run.

It is comparatively easy for any Magneto or Plug to show good results in a race of 400 or 500 miles, but a gruelling test of 25 days' continous and perfect work is a performance that proves to the utmost the efficiency and reliability of this incomparable Magneto and Plug.




The following is the last paragraph of a letter received by us from the Maxwell-Briscoe Motor Co. regarding this unparalleled feat:

"This test has conclusively proved to us that your Magneto is superior to anything we have ever used.

Yours very truly,
MAXWELL-BRISCOE MOTOR CO.
C. W. Kelsey."

Ask for Magneto catalog

CHICAGO: 319 Michigan Ave.
SAN FRANCISCO: 520 Van Ness Ave.
DETROIT: 886 Woodward Ave.
BOSTON: Motor Mart.

# C. F. SPLITDORF

Walton Ave. and 138th St. **NEW YORK**
Branch, 1679 Broadway

# Autoline

The Perfect Lubricating Oil for All Types of Motor Cars and Motor Boats

## The Oil that Saves the Motor

A supply of **Autoline** for cylinders, Greoil for transmissions and B Journal Compound for bearings cn a long trip secures a maximum of efficiency and a minimum of worry.

# Autoline

IF PROPERLY USED

## Will Not Carbonize--Will Not Soot

Quality and uniformity guaranteed—Accept no substitute. There is nothing "Just as Good" for a motor car of any description. If your garage does not keep **Autoline**, write us and name make of your car.

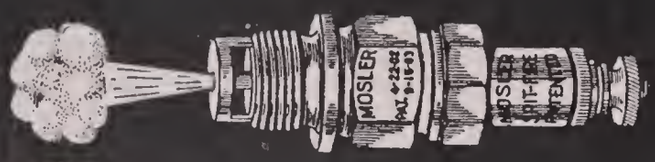
# Autoline

Manufactured by

## Wm. C. Robinson & Son Co.

CHICAGO, ILL. TERRE HAUTE, IND. BALTIMORE, MD.
BOSTON, MASS. PHILADELPHIA, PA. PITTSBURG, PA.
CINCINNATI, O.

REFINERY AT CORAOPOLIS, PA.



First on Land, First on Sea,
First in the Hearts of All Motormen

# Mosler Spit Fire PLUGS

# Lead the World

USED BY THE LEADING MANUFACTURERS

MAGNETO TYPE OF ALL SIZES

*Made to fit any engine, any thread.*
*Have heavy Genuine Iridium Platinum Points.*
*Can be had for the asking.*

**Energetic Ignition**

BASE Protects Porcelain and Sparking Points
BASE acts as Condenser of Electricity
BASE Forms Compression Chamber

**Greater Power**

BASE Makes Plugs Spit Fire
BASE Economizes Current
BASE Facilitates Sparking

INSIST UPON THE TWO PATENTED SIDE CLEANING HOLES
*—One is not enough!*

*We Protect our Registered Trade Mark and Patents. Dealers and Jobbers BEWARE!*

Do not be deceived by any other "Fire" name.
There is only ONE GENUINE "Spit Fire" plug—that made by

A. R. MOSLER & CO.
Originators of the "Spit Fire" principle

## A TRIUMPH FOR THE SPIT FIRE

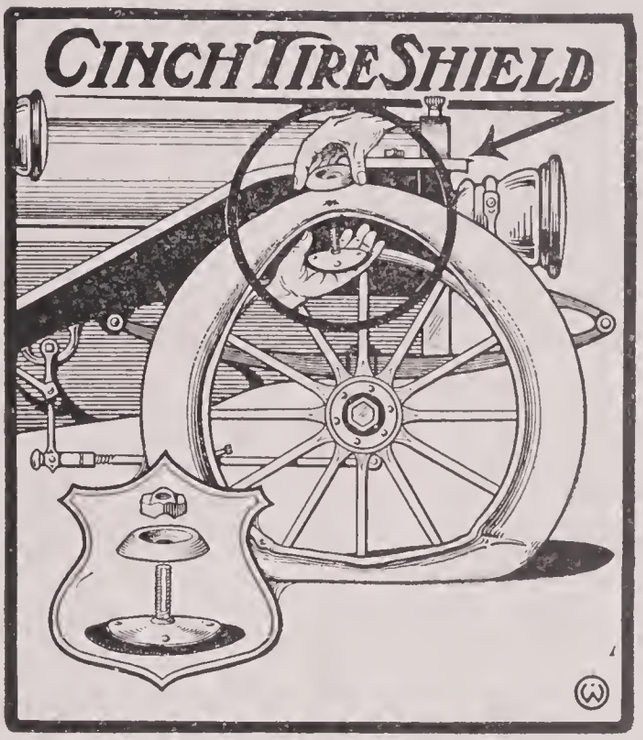
The ONLY Plugs in the WORLD that ACTUALLY Spit Fire

INSIST ON THE GENUINE, with Name on Porcelain and Base

A. R. MOSLER & CO 163 W 29th Street, New York

Don't Walk Home Don't Run on Flat Tires

Put on a **CINCH**




Patent Allowed

# ARE YOU PREPARED FOR A BLOW-OUT?

IF NOT

## GET A CINCH TIRE SHIELD

Made to fit any sized tire

Made either of LEATHER REINFORCED with STEEL or of STEEL COVERED WITH CANVAS

## WHY CARRY EXTRA CASES?

Put a few Cinches in the tool box and repair any and all blow-outs

## ASK FOR OUR CATALOGUE

OF

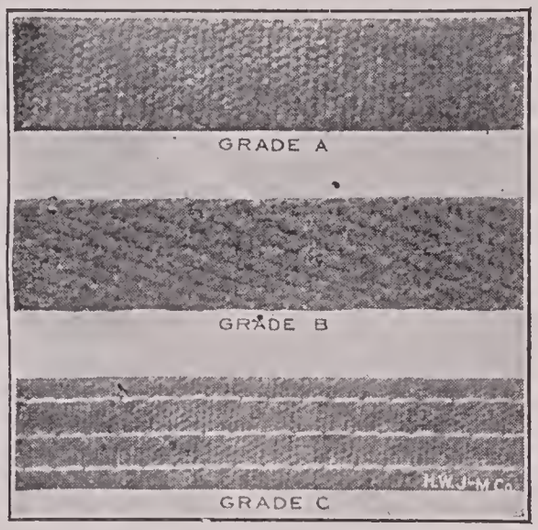
AUTO NOVELTIES AND SUPPLIES INCLUDING THE MARVELOUS TARNISH PREVENTATIVE

---

# LAWRENCE & WELCH

STERLING, ILLINOIS

*For sale by all Reliable Dealers*




MADE IN THREE GRADES—
Any Length or Thickness

# Non-Burn Brake Lining Locked Wheels Instantly

Out of the five most largely used brake band linings recently put to an exhaustive test by Mr. J. D. Maxwell, of the Maxwell Briscoe Motor Company.

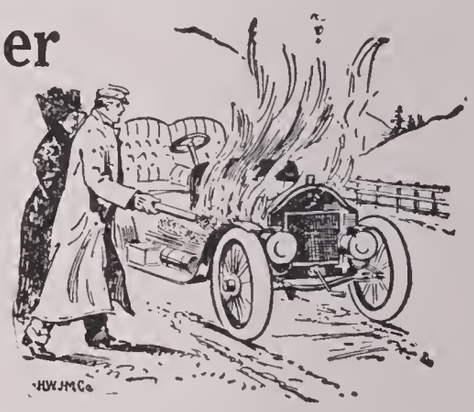
Non-Burn was the only one which locked wheels of car INSTANTLY. The lining which came nearest to this locked wheels in 12 feet.

A difference of only one foot in the stopping distance often averts a serious accident!

**NON-BURN BRAKE LINING** is made of pure long-fibred Asbestos with brass wires inserted. Heat from friction or oil and water do not affect it. Wears 40,000 to 50,000 miles.

***Write nearest Branch for Sample and Booklet.***

# Manville Fire Extinguisher




is absolutely warranted to put out any fire, whether arising from gasoline, benzine, calcium carbide, or any other cause, if thrown at the base of flames when fire first starts. It is also warranted not to injure paint or the upholstering, and not to freeze, cake in the tube, corrode or deteriorate with age.

Is always ready, always sure. **Over a Half Million in Use.**

***Write nearest Branch for Booklet.***

# Mobilene Packing Won't Blow Out

MOBILENE PACKING does not burn, char, harden and blow out like rubber, cloth and other so-called gas-engine packings. It is made of an indestructible mineral — *asbestos* — which heat does not affect.

MOBILENE also has exceptional strength because fine brass wires are intertwisted in each strand. It is pliable, compressible and easily cut. Is graphited one side and all ready to apply.

See that it is used on your auto and avoid vexatious delays. **Write nearest Branch for Sample and Booklet.**

# H. W. JOHNS-MANVILLE CO.

| | | | | |
|---|---|---|---|---|
| Baltimore | Cleveland | London | New Orleans | San Francisco |
| Boston | Dallas | Los Angeles | New York | Seattle |
| Buffalo | Detroit | Milwaukee | Philadelphia | St. Louis |
| Chicago | Kansas City | Minneapolis | Pittsburg | |

# Waterhouse Carburator

## No re-hashing of old methods, fundamentally new

IT HAS ONLY ONE ADJUSTMENT, THE NEEDLE VALVE, ONCE SET REMAINS FIXED FOR ALL SPEEDS

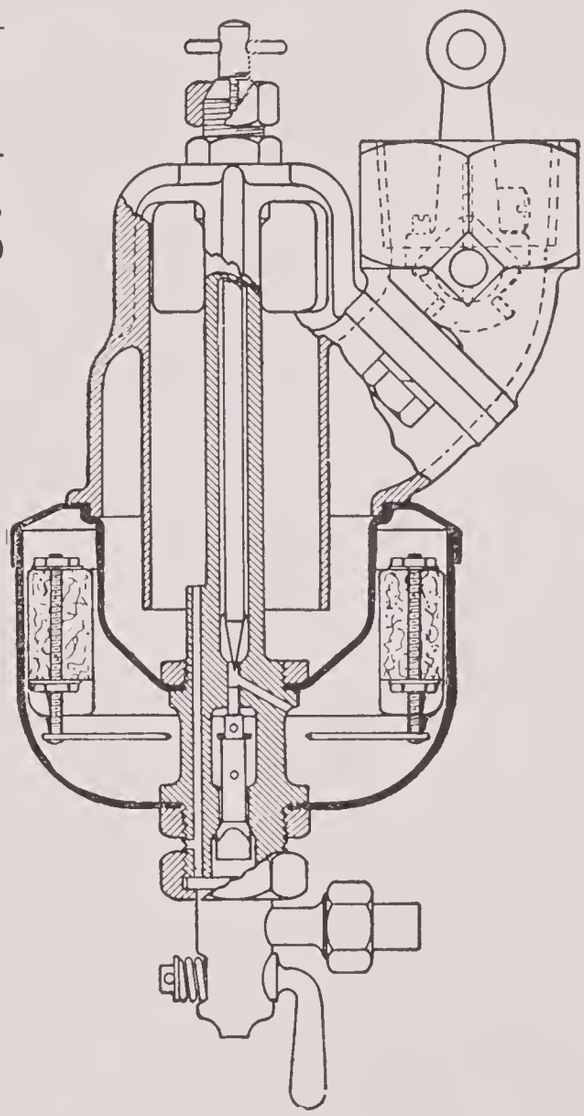
No Air Auxiliaries, no Springs and no Spray Nozzle, can't Flood.

Always primed for starting, won't choke up. Responds to the throttle instantly.

It's light in weight and very tiny.

Extremely powerful and gives absolutely no trouble.

Its price is low.



ONE-HALF ACTUAL MEASUREMENTS OF ONE INCH SIZE

Makers of the celebrated
Bemus Timers

**Monitor Mfg. Co.**

28 PELHAM COURT
Boston, Mass.

Manufacturers of the Famous
Monitor Distributors

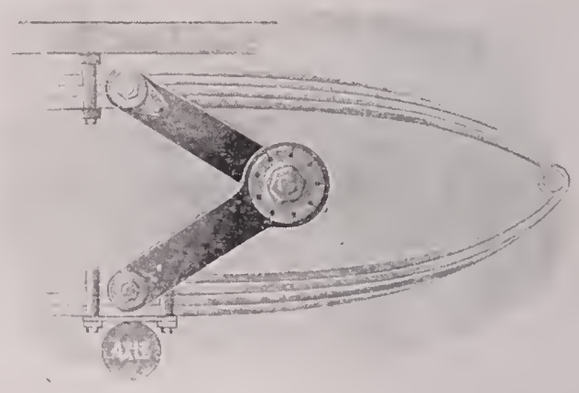
# STOP *THE JAR AND SHOCK.*

AND THE EVER WORKING INJURY TO YOUR CAR BY THE USE OF THE

# WESTEN SHOCK ABSORBER

THE ONLY SHOCK ABSORBER MADE THAT WILL AUTOMATICALLY ADJUST THEMSELVES TO ANY LOAD OR ROAD CONDITIONS.

This absorber automatically adjusts itself to the natural position regardless of the load carried by the vehicle, and at the same time brakes the upward as well as the downward motion of the springs.



In the ordinary shock absorber the absorbing qualities are lost by the addition of extra weight, or if the car meets with an unordinary obstruction. While the vibration of the engine is in no way checked and is the cause of much wear and tear. Westen Shock Absorbers catch all vibrations at all times no matter how small or how great. The automatic adjustment within itself make them superior. After once attached to your car assurance of safety and less cost for upkeep is guaranteed, and the unpleasant sound of the nerve racking rattle of loose parts is eliminated.

You should realize at once the damage done by oscillation and equip your car with Westen Shock Absorbers. You will then be prepared to meet unexpected jolts and unseen depressions in the road and add, at the same time, comfort to the passengers of the car.

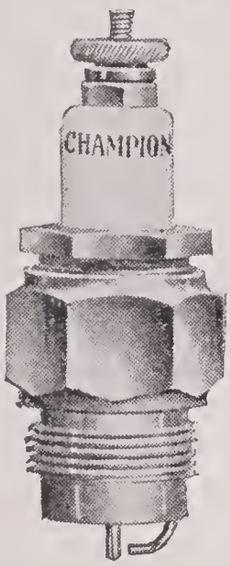
There are two friction planes which make the absorber capable of offering different degrees of resistance to the action of the vehicle springs under varying conditions.

## WESTEN MANUFACTURING CO.

290 HALSEY STREET

Newark, New Jersey

# The Right Spark Plug is an important adjunct to any Gas Engine




In the construction of the Champion Spark Plug the utmost care is given to every detail, thus assuring the best results.

The porcelain is of the very highest quality procurable.

The centre wire is firmly cemented and baked in, thus doing away with any possible leak of compression through that source.

The shell and bushing are cut from solid stock and so designed that when assembled porcelain does not actually come in contact with either at any point, thus preventing any chance of breakage from contraction or expansion of metal.

The workmanship on parts is so good and so accurate that no matter how many times the plug is taken apart and re-assembled the porcelain is always perfectly centered.

The electrodes or points are of nickel alloy; will not oxidize; are imperforable to spark of almost any intensity; are especially adapted to use with magneto, under which use the points will not burn off as they do on so many other plugs.

The combustion chamber at lower extremity of porcelain keeps the points free from soot, and practically eliminates any necessity for cleaning.

We particularly recommend the use of Champion Plugs under severest conditions, such as very high compression, excessive oil in cylinders, with magneto, etc.

Genuine Champion Spark Plugs are manufactured only by

## The Champion Company

36 Whittier Street, Boston, Mass.

This is a cash

6 60

proposition $10.00 only

Compare these sizes with other 6 volt
60 ampere Batteries

# 8 x $6\frac{1}{4}$ x $9\frac{1}{8}$

Guaranteed for one year or money refunded. Made in sizes from 40 amperes up

---

## MICHIGAN STORAGE BATTERY CO.

67 East Atwater Street, Detroit, Mich.

## *YOUR CAR CANNOT RUN EASIEST*

### *Nor Last Longest Without the Best Lubricant*

The ONE Automobile Oil and the ONE Automobile Grease you can always depend upon—that gives PERFECT SATISFACTION and reduces cost of lubrication and repair bills to a minimum is

# SPEARE'S

**AUTO OIL AND GREASE**

THEY SAVE WEAR
INCREASE POWER and
EVERY DROP LUBRICATES

## WHY?

Because they are manufactured by a firm with fifty-five years' experience in the lubricating oil business.

**Speare's Body Soap**
**Speare's Metal Polish**
**Speare's Waste**

are also the most economical you can buy

SPEARE'S GOODS are sold everywhere; if not, send dealer's name and write us direct.

DEALERS—Send for Speare's latest proposition.

## THE ALDEN SPEARE'S SONS CO.

Established 1851

253 Broadway
New York

369 Atlantic Avenue
BOSTON, MASSACHUSETTS

21 River Street
Chicago

# T. S. D. Recording Company

(Metropolitan Building)

## NO. 1 MADISON AVENUE, NEW YORK

Manufacturers of best modern devices and instruments for accurately measuring **TIME, SPEED, DISTANCE**, including stops or waiting time, and permanently registering same.

Machines suitable for all kinds of vehicles—horse drawn or motor. **Especially adapted for Automobiles.**

**T. S. D. Combination Recorder,** containing within a highly polished brass case, securely locked, with plate glass front, a Speedometer, Odometer, Clock (eight day, full-jewelled marine movement), and recording tape sufficient for one week, on which is correctly and permanently recorded time employed, speed attained, distance travelled and stops made day or night. **Absolutely eliminates "Joy Rides."**

**T. S. D. Commercial Recorder** (for commercial vehicles), comprising clock and record tape, locked within a solid metal case, and giving a clear, permanent record of exact movement of vehicles, thus **preventing or minimizing speeding or loitering.**

**T. S. D. Combination Recorder**

**Half Size**

**T. S. D. Speedometer and Odometer** combined

**T. S. D. Speedometer**—singly

**T. S. D. Odometer**

**T. S. D. Clocks**

**T. S. D. Taximeter** or **Taxirecord** for taxicabs and vehicles for hire

**Exclusive Territory To Responsible Representatives**

The construction of all T. S. D. Machines embodies features which mark a distinct advance in the State of the Art, and will meet all requirements of practicability, reliability, accuracy and durability, which instruments for the service intended should possess.

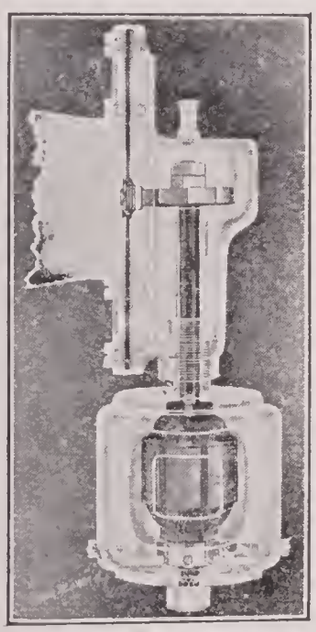
THE

# KLAXON

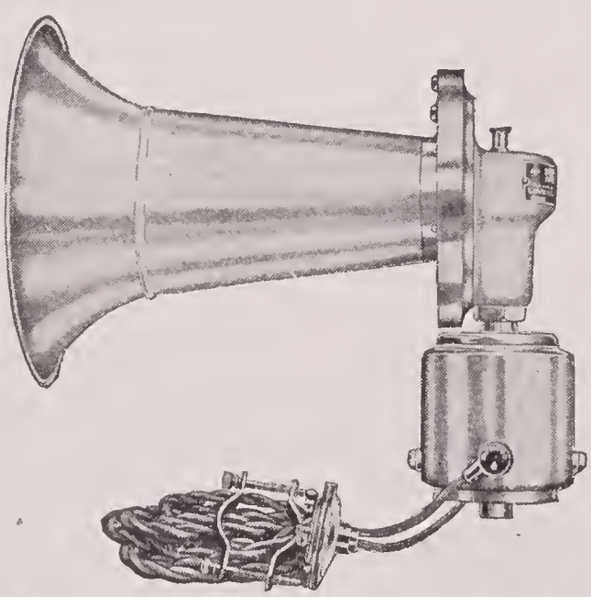
Trade Mark Reg. Patented Mar. 31-08, Jan. 19-09 (2), Feb. 2-09, May 25-09 (3)

"THE X-RAY OF SOUND"

THE "Klaxon" is a Noise machine. It is run by an electric motor and is built to run for years :: :: :: It operates from a 6 or 8-volt storage battery or 8 dry cells. It is not a horn--reed or electric---though it looks somewhat like one :: :: ::



Sectional view of KLAXON showing relative position of motor shaft, toothed wheel and vibrating diaphragm.



Type L—Long Projector

**Lovell-McConnell Mfg. Co.,** *Manufacturers*

365-367 Market Street, NEWARK, N. J.

**The Klaxon Company**

*Sole Distributors for U. S. A.*

1 Madison Avenue, NEW YORK

TOURISTS en route between
CHICAGO and NEW YORK

Can secure UNIFORM LUBRICATION and FREEDOM from CARBON TROUBLES, by calling for

# ANTI-CARBON AUTO OIL

*Made By*

## THE KEYSTONE REFINING CO.

**COLUMBUS, OHIO**

at any of the following FIRST-CLASS GARAGES along the route:

CHICAGO, ILL.
The Motor Car Supply Co., 1451-53 Michigan Ave.

HAMMOND, IND.
Hammond Garage Company

CROWN POINT, IND.
GARY, IND.
C. M. Baker

VALPARAISO, IND.
A. L. Zimmerman, 251 W. Main St.

LAPORTE, IND.
Auto Maintenance Co., 808 Monroe

LOGANSPORT, IND.
A. E. Dunn, Main Street

PERU, IND.—Adams & Sampsel

KOKOMO, IND.
J. E. Palethorpe, 20 East Sycamore

TIPTON, IND.
Tipton Garage and Machine Works

WAUSEON, OHIO
F. R. Harper

TOLEDO, OHIO
Atwood Garage, 2015 Monroe Street

FREMONT, OHIO
Fremont Auto & Repair Co., 207-09 Garrison Street

TIFFIN, OHIO
H. P. Klaiss, 123 East Market Street

BELLEVUE, OHIO—E. C. Reitz

OBERLIN, OHIO—A. P. Cook

ELYRIA, OHIO—The Auto Inn

LORAIN, OHIO
F. S. Rathwell, 425-27 Broadway

WILLOUGHBY, OHIO—Star Garage

ASHTABULA, OHIO
C. L. Scrivens Motor Co., 13 Spring Street

BUFFALO, N. Y.—Chas. E. Miller, 824 Main St.

NIAGARA FALLS, N. Y.
Niagara Falls Auto & Transit Co., 103 Main St.

BATAVIA, N. Y.—Hilte & Kennedy, 24 Main St.

ROCHESTER, N. Y.
Rochester Auto Supply Co., 375 Main Street

AUBURN, IND.
Auburn Automobile Co., 54-60 Water Street

SYRACUSE, N. Y.
Amos & Pierce Automobile Co.

ALBANY, N. Y.
Albany Garage Co., 28-30 Howard Street

NEW YORK—Chas. E. Miller, 97 Reid Street

By using the same grade of oil from start to finish you avoid the necessity of changing feed, and we are positive you can not start with a better oil, or one that will cause you LESS CARBON TROUBLE than our celebrated

**ANTI-CARBON AUTO OIL**

We will appreciate it if consumers will report to us any dealers who try to substitute an inferior oil for our ANTI-CARBON.

**THE KEYSTONE REFINING COMPANY**
**COLUMBUS, OHIO**

The same consistency for all seasons of the year. Not affected by severe con= ditions of heat and cold.

# KEYSTONE GREASE

ESTABLISHED 1884

Holds the record for lowest fric= tion and greatest test for endur= ance in the great plant of the Wil= liam Cramp & Sons Ship and Engine Building Company, Phila= delphia.

ORDER IT NEXT TIME

Has an estab= lished reputation in the power plant field for superiority and greatness. Ask any engineer anywhere.

Is not soluble in water like cheap grease.

ORDER IT NEXT TIME

## The World's Greatest Lubricant

No. 1 Density (solid) for use in all grease cups—on axle bearings or wherever the use of a solid lubricant might be required.

No. 3 Density (semi-solid) for transmission, differential and timing gear cases.

## KEYSTONE

Lubricating Company

Philadelphia

CHICAGO
907 Tacoma Bldg.

NEW YORK
1777 Broadway

BOSTON
Oliver Bldg.

NEW ORLEANS
612 Chartres Bldg.

Dealers and Jobbers write for our Special Proposition.

**Gus Balzer** Manufacturer and Manufacturers Representative

Representing

**MONOGRAM CREST AND SIGN CO.**

We Handle Following Goods:

Sawed and Etched Name Plates. Radiator Cap Eagles and Ornaments. Limousine Bouquet Holders.

We Make a Specialty of all Ornaments that are used on an Automobile

1777 Broadway New York

The so called Tire Problem is no Problem at all to a raft of

# Goodrich Tire

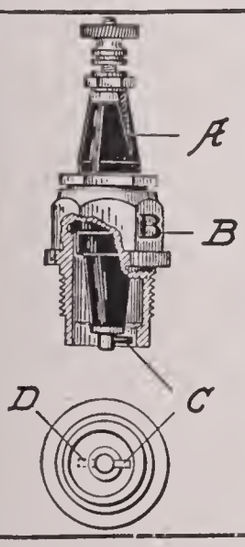
USERS

They get inexpensive pleasurable milage—and a good deal of it

**The B. F. Goodrich Company**

Akron, Ohio

Branches in all large Cities




## The "Excentric" Mica Plug

Try it and convince yourself of its superiority. Guaranteed for one year

**Mica Core Manufacturing Co.**

Makers of Spark Plugs, Mica Cores, Timers and Distributers

446 E. 166th STREET NEW YORK CITY

# WORCESTER IGNITION SPECIALTIES

**WORCESTER COMBINATION ROTARY SWITCH**
(Controller Type)

*Operated by Hand or Foot*

**WORCESTER AUTOMOBILE AND MARINE COILS**

*SEND FOR CATALOG*

## W. H. LELAND & COMPANY

WORCESTER :: MASSACHUSETTS

# PHOTO-AUTO MAPS

Photographs of every turn, together with a

## Topographical Outline of Road

Showing Railroad Crossings, Bridges, School Houses and All Landmarks, with Accurate Distances Between

## CHICAGO TO BUFFALO
## BUFFALO TO CHICAGO

---

Rand McNally & Company

PUBLISHERS

166 and 168 Adams Street
CHICAGO

142 Fifth Avenue
NEW YORK

©Aug. 7, 1909
Cl. A 244623
AUG 9 1909

GV 1024
.P47
v.2

# Instructions for Using Photo-Auto Maps

The best way to use the Photo-Auto Maps is to follow the route by the topographical map and refer to the photographs only to make sure that you are turning at the right place. Use your meter at all times to get the distances between turns. The distances given between turns will vary with different machines, as a slight difference in size of tires, different conditions of the roads and many other things tend to vary the register. Three meters were used and an average taken to get the distances given. The numbers in the squares and circles give the number of the photographs at the turns and the figures outside of them give the distance to the next photograph. The compass on each plate should be used to get correct directions. This map is not drawn to scale, but is made to show the turns to the best advantage. Where turns occur close together the map is enlarged and where there is a long straight run it is condensed, so do not judge distances by the appearances of the map. Go entirely by the meter readings. Distances between closest points only are given to insure the smallest variation. The distances given are the average obtained from three different makes of speedometers and a re-check by the Warner Auto-Meter.

*Copyright, 1907, by G. S. Chapin, Chicago*

*Copyright 1909, by Rand McNally, & Co., Chicago*

# Index to Towns

The first column of figures gives the numbers of the photos in the town or the nearest photo to it. The second column gives the number of the map on which the town is located.


| NAME OF TOWN | | Photo No. | Plate No. |
|---|---|---|---|
| **Albany** | N. Y. | 227–738<br>1C–56C | 30–31–401 |
| Amsterdam | " | 222–732 | 29 |
| Arcadia | Ind. | 43A–54A | 203 |
| Archbold | Ohio | 89–591 | 9 |
| Argos | Ind. | 3A–92A | 201 |
| Ashtabula | Ohio | 137–651 | 15 |
| Atlanta | Ind. | 37A–58A | 203 |
| Auburn | N. Y. | 193–708 | 25 |
| Batavia | " | 165–677 | 21 |
| Bellview | Ohio | 113–618 | 11 |
| Bergen | N. Y. | 172–682 | 21 |
| Blue Store | " | 246–758 | 32 |
| Brocton | " | 149–660 | 18 |
| Bryan | Ohio | 80–585 | 8 |
| Buchanan | N. Y. | 270–779 | 35 |
| **Buffalo** | " | 164–675 | 19–20 |
| Bunker Hill | Ind. | 13A–83A | 202 |
| Butler | " | 72–575 | 8 |
| Byron | N. Y. | 171–681 | 21 |
| Canastota | " | 211–721 | 27 |
| Camillius | " | 198–712 | 25 |
| **Chicago** | Ill. | 1–499 | 1 |
| Chittenango | N. Y. | 209–718 | 26 |
| Churchville | " | 172–683 | 21 |
| Cicero | Ind. | 44A–53A | 203 |
| Clarence | N. Y. | 164–677 | 20 |
| **Cleveland** | Ohio | 131–641 | 13–14 |
| Clyde | " | 112–618 | 11 |
| Cohoes | N. Y. | 9C–44C | 401 |
| Conneaut | Ohio | 142–654 | 16 |
| Cold Spring | N. Y. | 259–768 | 34 |
| Croton | " | 273–782 | 35 |
| Deerfield | " | 217–727 | 28 |
| Delta | Ohio | 95–599 | 9 |
| **Detroit** | Mich. | 11B–20B | 302 |
| Dobbs Ferry | N. Y. | 276–786 | 36 |
| East Pembroke | " | 164–677 | 20 |


CONTINUED ON NEXT PAGE

# To the Motorist Who is Down on His "Tire Luck"

You don't hear the man who uses Morgan & Wright tires saying much about his "tire luck," good or bad.

After he has used a pair or two, he gets out of the habit of ascribing the completion of a trip or a tour without tire trouble to good fortune. He lays it to ***"Good Tires"***—nothing else. He knows that—take tires made as Morgan & Wright tires are, out of the highest grade of materials with a painstaking care in regard to the minutest details of construction, and give them proper care—tire service ceases to be a matter of chance.

He gets a confidence in his tire equipment that adds much to the enjoyment of his car, and a freedom from repair bills that is a big help to his bank account.

There is no truer saying in motordom than that—

**MORGAN & WRIGHT TIRES**

**ARE GOOD TIRES**

Dealers everywhere sell them at the same price you are asked to pay for other brands.

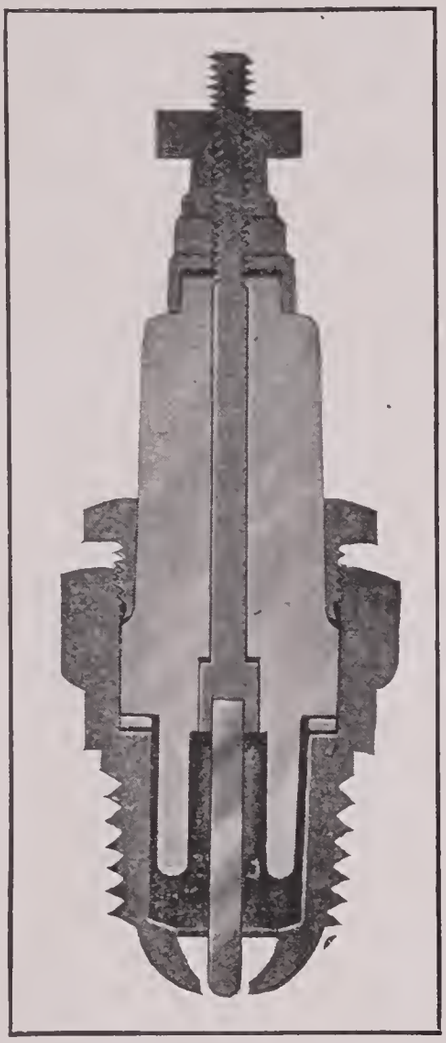
## Morgan & Wright, Detroit

# INDEX TO TOWNS—Continued


| NAME OF TOWN | | Photo No. | Plate No. |
|---|---|---|---|
| East Springfield | Pa. | 143–654 | 16 |
| Edgerton | Ohio | 75–578 | 8 |
| Elbridge | N. Y. | 197–711 | 25 |
| Elyria | Ohio | 125–633 | 12 |
| **Erie** | Pa. | 146–658 | 17 |
| Fairview | " | 144–655 | 16 |
| Fayetteville | N. Y. | 207–717 | 26 |
| Fishkill Village | " | 256–764 | 34 |
| Frankfort | " | 217–728 | 28 |
| Fredonia | " | 149–660 | 18 |
| Fremont | Ohio | 112–618 | 10 |
| Fonda | N. Y. | 221–730 | 29 |
| Geneva | Ohio | 136–649 | 15 |
| Genoa | " | 109–615 | 10 |
| Girard | Pa. | 144–655 | 16 |
| Goshen | Ind. | 48–552 | 6 |
| Hammond | " | 14–514 | 2 |
| Harbour Creek | Pa. | 147–659 | 17 |
| Hastings | N. Y. | 277–788 | 36 |
| Herkimer | " | 219–729 | 28 |
| Highlands | Ind. | 19–519 | 3 |
| Hobart | " | 21–520 | 3 |
| Hudson | N. Y. | 245–757 | 32 |
| Hyde Park | " | 249–762 | 33 |
| Ilion | " | 217–728 | 28 |
| Irving | " | 153–662 | 18 |
| Irvington | " | 275–786 | 36 |
| **Indianapolis** | Ind. | 48A | 204 |
| Kendallville | " | 65–569 | 7 |
| Kinderhook | N. Y. | 238–749 | 32 |
| Kipton | Ohio | 118–624 | 12 |
| Kirkland | N. Y. | 214–723 | 27 |
| **Kokomo** | Ind. | 18A–77A | 203 |
| Lakeville | " | 3A–92A | 201 |
| Lapaz | " | 3A–92A | 201 |
| La Porte | " | 38–539 | 4 |
| Ligonier | " | 54–557 | 7 |
| Little Falls | N. Y. | 220–730 | 28 |
| Macedon | " | 177–689 | 23 |
| Mechanicsville | " | 17C–39C | 402 |
| Mentor | Ohio | 133–645 | 14 |


CONTINUED ON NEXT PAGE

# Simplicity, Strength



FOR MAGNETO OR BATTERY

*Buy a*

# FRY

With Porcelain Insulator **75c**

With Mica Insulator ***$1.00***

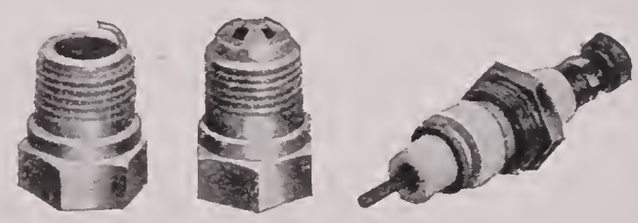
Compare it to-day with any plug in the world at any price.

USED EVERYWHERE SOLD EVERYWHERE

SATISFACTION GUARANTEED

## *Absolutely Indestructible*

*Closed-End*
or
*Open-End*



*Any Thread*
*Same Price*

CLEANED IN ONE MINUTE

STANDARD SALES COMPANY
MAKERS
J. STEWART SMITH, *Manager*

1779 Broadway, at 57th Street NEW YORK CITY

# INDEX TO TOWNS—Continued


| NAME OF TOWN | | Photo No. | Plate No. |
|---|---|---|---|
| Mexico | Ind. | 7A–89A | 202 |
| Miami | " | 16A–80A | 202 |
| Mishawaka | " | 44–546 | 6 |
| Monroe | Mich. | 4B–27B | 301 |
| Monroeville | Ohio | 115–621 | 11 |
| Mycenae | N. Y. | 207–717 | 26 |
| Nelliston | " | 221–730 | 29 |
| New Carlisle | Ind | 40–542 | 5 |
| New Hartford | N. Y. | 214–724 | 28 |
| **New York City** | " | 286–796 | 37 |
| Noblesville | Ind. | 45A–52A | 204 |
| North Chili | N. Y. | 173–683 | 21 |
| North East | Pa. | 147–659 | 17 |
| Norwalk | Ohio | 117–623 | 11 |
| Oberlin | " | 120–626 | 12 |
| Osceola | Ind. | 46–546 | 6 |
| Oneida Castle | N. Y. | 211–721 | 27 |
| Ossining | " | 275–784 | 36 |
| Palmyra | " | 179–692 | 23 |
| Palatine Bridge | " | 221–730 | 29 |
| Painesville | Ohio | 134–647 | 15 |
| Peekskill | N. Y. | 266–776 | 35 |
| Pembroke | " | 164–677 | 20 |
| Perrysburg | Ind. | 6A–89A | 202 |
| Peru | Ind. | 9A–87A | 202 |
| Phelps | N. Y. | 185–700 | 24 |
| Pittsford | " | 176–688 | 22 |
| Plymouth | Ind. | 3A–92A | 201 |
| Port Gibson | N. Y. | 180–694 | 23 |
| Portland | N. Y. | 149–660 | 17 |
| **Poughkeepsie** | " | 250–763 | 33 |
| Red Hook | " | 247–760 | 33 |
| Rensselaer | " | 231–742 | 31 |
| Rhinebeck | " | 247–761 | 33 |
| Ripley | " | 148–660 | 17 |
| **Rochester** | " | 174–684 | 22 |
| Rochester | Ind. | 4A–91A | 202 |
| **Saratoga Springs** | N. Y. | 27C–30C | 402 |
| Sharpsville | Ind. | 24A–73A | 203 |
| **Schenectady** | N. Y. | 223–735 | 30 |
| Schodack Center | " | 233–744 | 31 |


CONTINUED ON NEXT PAGE

# INDEX TO TOWNS—Continued


| NAME OF TOWN | | Photo No. | Plate No. |
|---|---|---|---|
| Scotia | N. Y. | 223–733 | 30 |
| Sennett | " | 197–710 | 25 |
| Sheridan | " | 149–660 | 18 |
| Sherill | " | 212–722 | 27 |
| Silver Creek | " | 150–661 | 18 |
| **South Bend** | Ind. | 42–544<br>2A–94A | 5–6–201 |
| Staatsburg | N. Y. | 249–762 | 33 |
| St. Johnsville | " | 221–730 | 29 |
| Stockport | " | 239–753 | 32 |
| Stottville | " | 241–755 | 32 |
| Stryker | Ohio | 85–588 | 9 |
| Stuyvesant Falls | N. Y. | 239–752 | 32 |
| Sulivan | " | 211–720 | 26 |
| Swanton | Ohio | 96–599 | 9 |
| **Syracuse** | N. Y. | 202–715 | 25–26 |
| Tarrytown | " | 275–785 | 36 |
| Tipton | Ind. | 32A–66A | 203 |
| **Toledo** | Ohio | 104–607<br>1B–32B | 9–10<br>301 |
| Trenton | Mich. | 9B–23B | 302 |
| Upper Red Hook | N. Y. | 247–759 | 33 |
| **Utica** | " | 215–726 | 28 |
| Valparaiso | Ind. | 29–529 | 3 |
| Vernon | N. Y. | 213–723 | 27 |
| Wakeman | Ohio | 117–623 | 11 |
| Wappingers Falls | N. Y. | 253–764 | 34 |
| Waterford | " | 15C–41C | 401 |
| Waterloo | Ind. | 70–572 | 8 |
| Wauseon | Ohio | 91–594 | 9 |
| Wawaka | Ind. | 60–562 | 7 |
| Wesleyville | Pa. | 147–659 | 17 |
| Westfield | N. Y. | 148–660 | 17 |
| West Springfield | Pa. | 143–654 | 16 |
| Westville | Ind. | 35–534 | 4 |
| Wheeler | " | 25–526 | 3 |
| Williamsville | N. Y. | 164–677 | 20 |
| Willoughby | Ohio | 133–644 | 14 |
| Woodville | " | 111–617 | 10 |
| Wyandotte | Mich. | 10B–21B | 302 |
| **Yonkers** | N. Y. | 277–788 | 36 |

# Table of Distances Between Points

## CHICAGO TO SOUTH BEND

| FROM — TO | Chicago | Hammond | Highlands | Hobart | Wheeler | Valparaiso | Westville | La Porte | New Carlisle | South Bend |
|---|---|---|---|---|---|---|---|---|---|---|
| Chicago - - - - - - - | — | 19.6 | 26.9 | 39.0 | 44.8 | 53.4 | 64.7 | 76.5 | 91.0 | 106.2 |
| Hammond - - - - - | 19.6 | — | 7.3 | 19.4 | 25.2 | 33.8 | 45.1 | 56.9 | 71.4 | 86.6 |
| Highlands - - - - - - | 26.9 | 7.3 | — | 12.1 | 17.9 | 26.5 | 37.8 | 49.6 | 64.1 | 79.3 |
| Hobart - - - - - - | 39.0 | 19.4 | 12.1 | — | 5.8 | 14.4 | 25.7 | 37.5 | 52.0 | 67.2 |
| Wheeler - - - - - - | 44.8 | 25.2 | 17.9 | 5.8 | — | 8.6 | 19.9 | 31.7 | 46.2 | 61.4 |
| Valparaiso - - - - - | 53.4 | 33.8 | 26.5 | 14.4 | 8.6 | — | 11.3 | 23.1 | 37.6 | 52.8 |
| Westville - - - - - - | 64.7 | 45.1 | 37.8 | 25.7 | 19.9 | 11.3 | — | 11.8 | 26.3 | 41.5 |
| La Porte - - - - - - | 76.5 | 56.9 | 49.6 | 37.5 | 31.7 | 23.1 | 11.8 | — | 14.5 | 29.7 |
| New Carlisle - - - - - | 91.0 | 71.4 | 64.1 | 52.0 | 46.2 | 37.6 | 26.3 | 14.5 | — | 15.2 |
| South Bend - - - - - | 106.2 | 86.6 | 79.3 | 67.2 | 61.4 | 52.8 | 41.5 | 29.7 | 15.2 | — |

# TABLE OF DISTANCES

| | South Bend | Mishawaka | Osceola | Goshen | Benton | Ligonier | Wawaka | Kendallville | Waterloo | Butler | Edgerton | Bryan | Stryker | Archbold | Wauseon | Delta | Swanton | Toledo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| South Bend | | 4.5 | 10.2 | 24.8 | 32.1 | 42.8 | 49.1 | 61.8 | 76.8 | 84.5 | 91.7 | 103.4 | 112.1 | 119.3 | 129.7 | 140.6 | 146.0 | 173.4 |
| Mishawaka | 4.5 | **P** | 5.7 | 20.3 | 27.6 | 38.3 | 44.6 | 57.3 | 72.3 | 80.0 | 87.2 | 98.9 | 107.6 | 114.8 | 125.2 | 136.1 | 141.5 | 168.9 |
| Osceola | 10.2 | 5.7 | **H** | 14.6 | 21.9 | 32.6 | 38.9 | 51.6 | 66.6 | 74.3 | 81.5 | 93.2 | 101.9 | 109.1 | 119.5 | 130.4 | 135.8 | 163.2 |
| Goshen | 24.8 | 20.3 | 14.6 | **O** | 7.3 | 18.0 | 24.3 | 37.0 | 52.0 | 59.7 | 66.9 | 78.6 | 87.3 | 94.5 | 104.9 | 115.8 | 121.2 | 148.6 |
| Benton | 32.1 | 27.6 | 21.9 | 7.3 | **T** | 10.7 | 17.0 | 29.7 | 44.7 | 52.4 | 59.6 | 71.3 | 80.0 | 87.2 | 97.6 | 108.5 | 113.9 | 141.3 |
| Ligonier | 42.8 | 38.3 | 32.6 | 18.0 | 10.7 | **O** | 6.3 | 19.0 | 34.0 | 41.7 | 48.9 | 60.6 | 69.3 | 76.5 | 86.9 | 97.8 | 103.2 | 130.6 |
| Wawaka | 49.1 | 44.6 | 38.9 | 24.3 | 17.0 | 6.3 | | 12.7 | 27.7 | 35.4 | 42.6 | 54.3 | 63.0 | 70.2 | 80.6 | 91.5 | 96.9 | 124.3 |
| Kendallville | 61.8 | 57.3 | 51.6 | 37.0 | 29.7 | 19.0 | 12.7 | **A** | 15.0 | 22.7 | 29.9 | 41.6 | 50.3 | 57.5 | 67.9 | 78.8 | 84.2 | 111.6 |
| Waterloo | 76.8 | 72.3 | 66.6 | 52.0 | 44.7 | 34.0 | 27.7 | 15.0 | **U** | 7.7 | 14.9 | 26.6 | 35.3 | 42.5 | 52.9 | 63.8 | 69.2 | 96.6 |
| Butler | 84.5 | 80.0 | 74.3 | 59.7 | 52.4 | 41.7 | 35.4 | 22.7 | 7.7 | **T** | 7.2 | 18.9 | 27.6 | 34.8 | 45.2 | 56.1 | 61.5 | 88.9 |
| Edgerton | 91.7 | 87.2 | 81.5 | 66.9 | 59.6 | 48.9 | 42.6 | 29.9 | 14.9 | 7.2 | **O** | 11.7 | 20.4 | 27.6 | 38.0 | 48.9 | 54.3 | 81.7 |
| Bryan | 103.4 | 98.9 | 93.2 | 78.6 | 71.3 | 60.6 | 54.3 | 41.6 | 26.6 | 18.9 | 11.7 | | 8.7 | 15.9 | 26.3 | 37.2 | 42.6 | 70.0 |
| Stryker | 112.1 | 107.6 | 101.9 | 87.3 | 80.0 | 69.3 | 63.0 | 50.3 | 35.3 | 27.6 | 20.4 | 8.7 | **M** | 7.2 | 17.6 | 28.5 | 33.9 | 61.3 |
| Archbold | 119.3 | 114.8 | 109.1 | 94.5 | 87.2 | 76.5 | 70.2 | 57.5 | 42.5 | 34.8 | 27.6 | 15.9 | 7.2 | **A** | 10.4 | 21.3 | 26.7 | 54.1 |
| Wauseon | 129.7 | 125.2 | 119.5 | 104.9 | 97.6 | 86.9 | 80.6 | 67.9 | 52.9 | 45.2 | 38.0 | 26.3 | 17.6 | 10.4 | **P** | 10.9 | 16.3 | 43.7 |
| Delta | 140.6 | 136.1 | 130.4 | 115.8 | 108.5 | 97.8 | 91.5 | 78.8 | 63.8 | 56.1 | 48.9 | 37.2 | 28.5 | 21.3 | 10.9 | **S** | 5.4 | 32.8 |
| Swanton | 146.0 | 141.5 | 135.8 | 121.2 | 113.9 | 103.2 | 96.9 | 84.2 | 69.2 | 61.5 | 54.3 | 42.6 | 33.9 | 26.7 | 16.3 | 5.4 | | 27.4 |
| Toledo | 173.4 | 168.9 | 163.2 | 148.6 | 141.3 | 130.6 | 124.3 | 111.6 | 96.6 | 88.9 | 81.7 | 70.0 | 61.3 | 54.1 | 43.7 | 32.8 | 27.4 | |

# TABLE OF DISTANCES

| | Toledo | Genoa | Woodville | Fremont | Clyde | Bellview | Monroeville | Norwalk | Townsend | Wakeman | Kipton | Oberlin | Elyria | Ridgeville | Dover | Cleveland |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Toledo | | 14.1 | 19.4 | 33.3 | 42.3 | 49.9 | 58.4 | 63.5 | 70.2 | 74.7 | 82.5 | 88.4 | 97.8 | 102.6 | 109.7 | 123.7 |
| Genoa | 14.1 | **P** | 5.3 | 19.2 | 28.2 | 35.8 | 44.3 | 49.4 | 56.1 | 60.6 | 68.4 | 74.3 | 83.7 | 88.5 | 95.6 | 109.6 |
| Woodville | 19.4 | 5.3 | **H** | 13.9 | 22.9 | 30.5 | 39.0 | 44.1 | 50.8 | 55.3 | 63.1 | 69.0 | 78.4 | 83.2 | 90.3 | 104.3 |
| Fremont | 33.3 | 19.2 | 13.9 | **O** | 9.0 | 16.6 | 25.1 | 30.2 | 36.9 | 41.4 | 49.2 | 55.1 | 64.5 | 69.3 | 76.4 | 90.4 |
| Clyde | 42.3 | 28.2 | 22.9 | 9.0 | **T** | 7.6 | 16.1 | 21.2 | 27.9 | 32.4 | 40.2 | 46.1 | 55.5 | 60.3 | 67.4 | 81.4 |
| Bellview | 49.9 | 35.8 | 30.5 | 16.6 | 7.6 | **O** | 8.5 | 13.6 | 20.3 | 24.8 | 32.6 | 38.5 | 47.9 | 52.7 | 59.8 | 73.8 |
| Monroeville | 58.4 | 44.3 | 39.0 | 25.1 | 16.1 | 8.5 | | 5.1 | 11.8 | 16.3 | 24.1 | 30.0 | 39.4 | 44.2 | 51.3 | 65.3 |
| Norwalk | 63.5 | 49.4 | 44.1 | 30.2 | 21.2 | 13.6 | 5.1 | **A** | 6.7 | 11.2 | 19.0 | 24.9 | 34.3 | 39.1 | 46.2 | 60.2 |
| Townsend | 70.2 | 56.1 | 50.8 | 36.9 | 27.9 | 20.3 | 11.8 | 6.7 | **U** | 4.5 | 12.3 | 18.2 | 27.6 | 32.4 | 39.5 | 53.5 |
| Wakeman | 74.7 | 60.6 | 55.3 | 41.4 | 32.4 | 24.8 | 16.3 | 11.2 | 4.5 | **T** | 7.8 | 13.7 | 23.1 | 27.9 | 35.0 | 49.0 |
| Kipton | 82.5 | 68.4 | 63.1 | 49.2 | 40.2 | 32.6 | 24.1 | 19.0 | 12.3 | 7.8 | **O** | 5.9 | 15.3 | 20.1 | 27.2 | 41.2 |
| Oberlin | 88.4 | 74.3 | 69.0 | 55.1 | 46.1 | 38.5 | 30.0 | 24.9 | 18.2 | 13.7 | 5.9 | | 9.4 | 14.2 | 21.3 | 35.0 |
| Elyria | 97.8 | 83.7 | 78.4 | 64.5 | 55.5 | 47.9 | 39.4 | 34.3 | 27.6 | 23.1 | 15.3 | 9.4 | **M** | 4.8 | 11.9 | 25.9 |
| Ridgeville | 102.6 | 88.5 | 83.2 | 69.3 | 60.3 | 52.7 | 44.2 | 39.1 | 32.4 | 27.9 | 20.1 | 14.2 | 4.8 | **A** | 7.1 | 21.1 |
| Dover | 109.7 | 95.6 | 90.3 | 76.4 | 67.4 | 59.8 | 51.3 | 46.2 | 39.5 | 35.0 | 27.2 | 21.3 | 11.9 | 7.1 | **P** | 14.0 |
| Cleveland | 123.7 | 109.6 | 104.3 | 90.4 | 81.4 | 73.8 | 65.3 | 60.2 | 53.5 | 49.0 | 41.2 | 35.0 | 25.9 | 21.1 | 14.0 | **S** |

# TABLE OF DISTANCES

| | Cleveland | Willoughby | Mentor | Painesville | Geneva | Ashtabula | Conneaut | E. Springfield | Girard | Fairview | Erie | Buffalo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cleveland | | 18.8 | 23.5 | 29.7 | 47.5 | 58.0 | 71.8 | 80.4 | 85.9 | 90.2 | 102.1 | 197.2 |
| Willoughby | 18.8 | | 4.7 | 10.9 | 28.7 | 39.2 | 53.0 | 61.6 | 67.1 | 71.4 | 83.3 | 178.4 |
| Mentor | 23.5 | 4.7 | | 6.2 | 24.0 | 34.5 | 48.3 | 56.9 | 62.4 | 66.7 | 78.6 | 173.7 |
| Painesville | 29.7 | 10.9 | 6.2 | | 17.8 | 28.3 | 42.1 | 50.7 | 56.2 | 60.5 | 72.4 | 167.5 |
| Geneva | 47.5 | 28.7 | 24.0 | 17.8 | | 10.5 | 24.3 | 32.9 | 38.4 | 42.7 | 54.6 | 149.7 |
| Ashtabula | 58.0 | 39.2 | 34.5 | 28.3 | 10.5 | | 13.8 | 22.4 | 27.9 | 32.2 | 44.1 | 139.2 |
| Conneaut | 71.8 | 53.0 | 48.3 | 42.1 | 24.3 | 13.8 | | 8.6 | 14.1 | 18.4 | 30.3 | 125.4 |
| E. Springfield | 80.4 | 61.6 | 56.9 | 50.7 | 32.9 | 22.4 | 8.6 | | 5.5 | 9.8 | 21.7 | 116.8 |
| Girard | 85.9 | 67.1 | 62.4 | 56.2 | 38.4 | 27.9 | 14.1 | 5.5 | | 4.3 | 16.2 | 111.3 |
| Fairview | 90.2 | 71.4 | 66.7 | 60.5 | 42.7 | 32.2 | 18.4 | 9.8 | 4.3 | | 11.9 | 107.0 |
| Erie | 102.1 | 83.3 | 78.6 | 72.4 | 54.6 | 44.1 | 30.3 | 21.7 | 16.2 | 11.9 | | 95.1 |
| Buffalo | 197.2 | 178.4 | 173.7 | 167.5 | 149.7 | 139.2 | 125.4 | 116.8 | 111.3 | 107.0 | 95.1 | |

# TABLE OF DISTANCES

| | Cleveland | Erie | Wesleyville | Harbour Creek | North East | Ripley | Westfield | Portland | Brocton | Fredonia | Sheridan | Silver Creek | Irving | Buffalo |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cleveland | | 102.1 | 106.2 | 110.0 | 117.2 | 126.1 | 133.1 | 140.3 | 141.9 | 148.8 | 154.7 | 160.9 | 164.3 | 197.2 |
| Erie | 102.1 | | 4.1 | 7.9 | 15.1 | 24.0 | 31.0 | 38.2 | 39.8 | 46.7 | 52.6 | 58.8 | 62.2 | 95.1 |
| Wesleyville | 106.2 | 4.1 | | 3.8 | 11.0 | 19.9 | 26.9 | 34.1 | 35.7 | 42.6 | 48.5 | 54.7 | 58.1 | 91.0 |
| Harbour Creek | 110.0 | 7.9 | 3.8 | | 7.2 | 16.1 | 23.1 | 30.3 | 31.9 | 38.8 | 44.7 | 50.9 | 54.3 | 87.2 |
| North East | 117.2 | 15.1 | 11.0 | 7.2 | | 8.9 | 15.9 | 23.1 | 24.7 | 31.6 | 37.5 | 43.7 | 47.1 | 80.0 |
| Ripley | 126.1 | 24.0 | 19.9 | 16.1 | 8.9 | | 7.0 | 14.2 | 15.8 | 22.7 | 28.6 | 34.8 | 38.2 | 71.1 |
| Westfield | 133.1 | 31.0 | 26.9 | 23.1 | 15.9 | 7.0 | | 7.2 | 8.8 | 15.7 | 21.6 | 27.8 | 31.2 | 64.1 |
| Portland | 140.3 | 38.2 | 34.1 | 30.3 | 23.1 | 14.2 | 7.2 | | 1.6 | 8.5 | 14.4 | 20.6 | 24.0 | 56.9 |
| Brocton | 141.9 | 39.8 | 35.7 | 31.9 | 24.7 | 15.8 | 8.8 | 1.6 | | 6.9 | 12.8 | 19.0 | 22.4 | 55.3 |
| Fredonia | 148.8 | 46.7 | 42.6 | 38.8 | 31.6 | 22.7 | 15.7 | 8.5 | 6.9 | | 5.9 | 12.1 | 15.5 | 48.4 |
| Sheridan | 154.7 | 52.6 | 48.5 | 44.7 | 37.5 | 28.6 | 21.6 | 14.4 | 12.8 | 5.9 | | 6.2 | 9.6 | 42.5 |
| Silver Creek | 160.9 | 58.8 | 54.7 | 50.9 | 43.7 | 34.8 | 27.8 | 20.6 | 19.0 | 12.1 | 6.2 | | 3.4 | 36.3 |
| Irving | 164.3 | 62.2 | 58.1 | 54.3 | 47.1 | 38.2 | 31.2 | 24.0 | 22.4 | 15.5 | 9.6 | 3.4 | | 32.9 |
| Buffalo | 197.2 | 95.1 | 91.0 | 87.2 | 80.0 | 71.1 | 64.1 | 56.9 | 55.3 | 48.4 | 42.5 | 36.3 | 32.9 | |

# TABLE OF DISTANCES

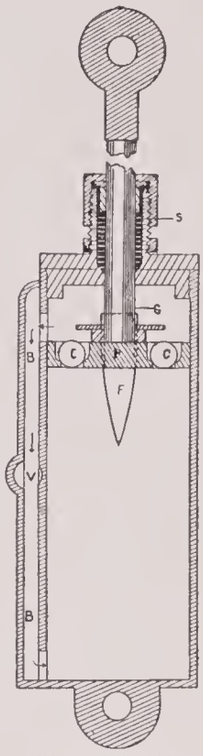
| | Buffalo | Batavia | Bergen | Churchville | Rochester | Pittsford | Macedon | Palmyra | Phelps | Auburn | Elbridge | Camillius | Syracuse | Albany |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Buffalo | | 39.6 | 55.6 | 59.0 | 73.4 | 80.6 | 92.0 | 97.2 | 111.7 | 138.9 | 149.6 | 156.6 | 165.5 | 318.0 |
| Batavia | 39.6 | | 16.0 | 19.4 | 33.8 | 41.0 | 52.4 | 57.6 | 72.1 | 99.3 | 110.0 | 117.0 | 125.9 | 278.4 |
| Bergen | 55.6 | 16.0 | | 3.4 | 17.8 | 25.0 | 36.4 | 41.6 | 56.1 | 83.3 | 94.0 | 101.0 | 109.9 | 262.4 |
| Churchville | 59.0 | 19.4 | 3.4 | | 14.4 | 21.6 | 33.0 | 38.2 | 52.7 | 79.9 | 90.6 | 97.6 | 106.5 | 259.0 |
| Rochester | 73.4 | 33.8 | 17.8 | 14.4 | | 7.2 | 18.6 | 23.8 | 38.3 | 65.5 | 76.2 | 83.2 | 92.1 | 244.6 |
| Pittsford | 80.6 | 41.0 | 25.0 | 21.6 | 7.2 | | 11.4 | 16.6 | 31.1 | 58.3 | 69.0 | 76.0 | 84.9 | 237.4 |
| Macedon | 92.0 | 52.4 | 36.4 | 33.0 | 18.6 | 11.4 | | 5.2 | 19.7 | 46.9 | 57.6 | 64.6 | 73.5 | 226.0 |
| Palmyra | 97.2 | 57.6 | 41.6 | 38.2 | 23.8 | 16.6 | 5.2 | | 14.5 | 41.7 | 52.4 | 59.4 | 68.3 | 220.8 |
| Phelps | 111.7 | 72.1 | 56.1 | 52.7 | 38.3 | 31.1 | 19.7 | 14.5 | | 27.2 | 37.9 | 44.9 | 53.8 | 206.3 |
| Auburn | 138.9 | 99.3 | 83.3 | 79.9 | 65.5 | 58.3 | 46.9 | 41.7 | 27.2 | | 10.7 | 17.7 | 26.6 | 179.1 |
| Elbridge | 149.6 | 110.0 | 94.0 | 90.6 | 76.2 | 69.0 | 57.6 | 52.4 | 37.9 | 10.7 | | 7.0 | 15.9 | 168.4 |
| Camillius | 156.6 | 117.0 | 101.0 | 97.6 | 83.2 | 76.0 | 64.6 | 59.4 | 44.9 | 17.7 | 7.0 | | 8.9 | 161.4 |
| Syracuse | 165.5 | 125.9 | 109.9 | 106.5 | 92.1 | 84.9 | 73.5 | 68.3 | 53.8 | 26.6 | 15.9 | 8.9 | | 152.5 |
| Albany | 318.0 | 278.4 | 262.4 | 259.0 | 244.6 | 237.4 | 226.0 | 220.8 | 206.3 | 179.1 | 168.4 | 161.4 | 152.5 | |

# "DON'T BE SHOCKED!"

"BOSTON" SHOCK ABSORBERS will save
Wear on your engine and transmission,
Breaking of your springs,
Dollars in your pocket,
Racking of your nerves and spinal column.

"BOSTON" SHOCK ABSORBERS will give you
More power from your engine,
More pleasure and comfort from autoing,
A more quiet running car.

"BOSTON" SHOCK ABSORBERS will increase
The life of your car 50%,
The mileage of travel per gallon of gasoline.



THE BOSTON
PAT. APPLIED FOR

## The "BOSTON"

**Does not** stiffen or in any way injure the action of the springs.

**Does not** drag on the spring under any condition.

**Does not** get out of order.

**Does** prevent you from being thrown out of the seat.

**Does** prevent continued bouncing after a jounce.

**Does** really absorb the shock.

30 DAYS TRIAL — FULLY GUARANTEED

PRICE, $80.00 per set of four, with hangers fitted and already to put on.

EXPRESS PREPAID

## KNAPP-GREENWOOD COMPANY

1000 BOYLSTON STREET, BOSTON, MASS.

BRANCHES:

BUCHANAN & BROKAW
707 Shukert Bldg., Kansas City, Mo.

THOMAS D. AUSTIN
249 W. 57th Street, New York City

MOTOR CAR SUPPLY CO.
Chicago, Ill.

JOHN S. MARTIN
Ross, Cal.

# TABLE OF DISTANCES

| | Buffalo | Syracuse | Fayetteville | Chittenango | Canastota | Oneida Castle | Kirkland | New Hartford | Utica | Herkimer | Little Falls | St. Johnsville | Fonda | Amsterdam | Schenectady | Albany |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Buffalo | **P** | 165.5 | 172.8 | 180.8 | 187.5 | 193.2 | 207.0 | 211.8 | 215.3 | 231.4 | 238.4 | 256.3 | 276.7 | 287.4 | 303.0 | 318.0 |
| Syracuse | 165.5 | **H** | 7.3 | 15.3 | 22.0 | 27.7 | 41.5 | 46.3 | 49.8 | 65.9 | 72.9 | 90.8 | 111.2 | 121.9 | 137.5 | 152.5 |
| Fayetteville | 172.8 | 7.3 | **O** | 8.0 | 14.7 | 22.4 | 36.2 | 39.0 | 42.5 | 58.6 | 65.6 | 83.5 | 103.9 | 114.6 | 130.2 | 145.2 |
| Chittenango | 180.8 | 15.3 | 8.0 | **T** | 6.7 | 12.4 | 26.2 | 31.0 | 34.5 | 50.6 | 57.6 | 75.5 | 95.9 | 106.6 | 122.2 | 137.2 |
| Canastota | 187.5 | 22.0 | 14.7 | 6.7 | **O** | 5.7 | 19.5 | 24.3 | 27.8 | 43.9 | 50.9 | 68.8 | 89.2 | 99.9 | 115.5 | 130.5 |
| Oneida Castle | 193.2 | 27.7 | 22.4 | 12.4 | 5.7 | | 13.8 | 18.6 | 22.1 | 38.2 | 45.2 | 63.1 | 83.5 | 94.2 | 109.8 | 124.8 |
| Kirkland | 207.0 | 41.5 | 36.2 | 26.2 | 19.5 | 13.8 | **A** | 4.8 | 8.3 | 24.4 | 31.4 | 49.3 | 69.7 | 80.4 | 96.0 | 111.0 |
| New Hartford | 211.8 | 46.3 | 39.0 | 31.0 | 24.3 | 18.6 | 4.8 | **U** | 3.5 | 19.6 | 26.6 | 44.5 | 64.9 | 75.6 | 91.2 | 106.2 |
| Utica | 215.3 | 49.8 | 42.5 | 34.5 | 27.8 | 22.1 | 8.3 | 3.5 | **T** | 16.1 | 23.1 | 41.0 | 61.4 | 72.1 | 87.7 | 102.7 |
| Herkimer | 231.4 | 65.9 | 58.6 | 50.6 | 43.9 | 38.2 | 24.4 | 19.6 | 16.1 | **O** | 7.0 | 24.9 | 45.3 | 56.0 | 71.6 | 86.6 |
| Little Falls | 238.4 | 72.9 | 65.6 | 57.6 | 50.9 | 45.2 | 31.4 | 26.6 | 23.1 | 7.0 | | 17.9 | 38.3 | 49.0 | 64.6 | 79.6 |
| St. Johnsville | 256.3 | 90.8 | 83.5 | 75.5 | 68.8 | 63.1 | 49.3 | 44.5 | 41.0 | 24.9 | 17.9 | **M** | 20.4 | 31.1 | 56.7 | 71.7 |
| Fonda | 276.7 | 111.2 | 103.9 | 95.9 | 89.2 | 83.5 | 69.7 | 64.9 | 61.4 | 45.3 | 38.3 | 20.4 | **A** | 10.7 | 26.3 | 41.3 |
| Amsterdam | 287.4 | 121.9 | 114.6 | 106.6 | 99.9 | 94.2 | 80.4 | 75.6 | 72.1 | 56.0 | 49.0 | 31.1 | 10.7 | **P** | 15.6 | 30.6 |
| Schenectady | 303.0 | 137.5 | 130.2 | 122.2 | 115.5 | 109.8 | 96.0 | 91.2 | 87.7 | 71.6 | 64.6 | 56.7 | 26.3 | 15.6 | **S** | 15.0 |
| Albany | 318.0 | 152.5 | 145.2 | 137.2 | 130.5 | 124.8 | 111.0 | 106.2 | 102.7 | 86.6 | 79.6 | 71.7 | 41.3 | 30.6 | 15.0 | |

# WINESTOCK SPARK PLUGS

(QUICK DETACHABLE)

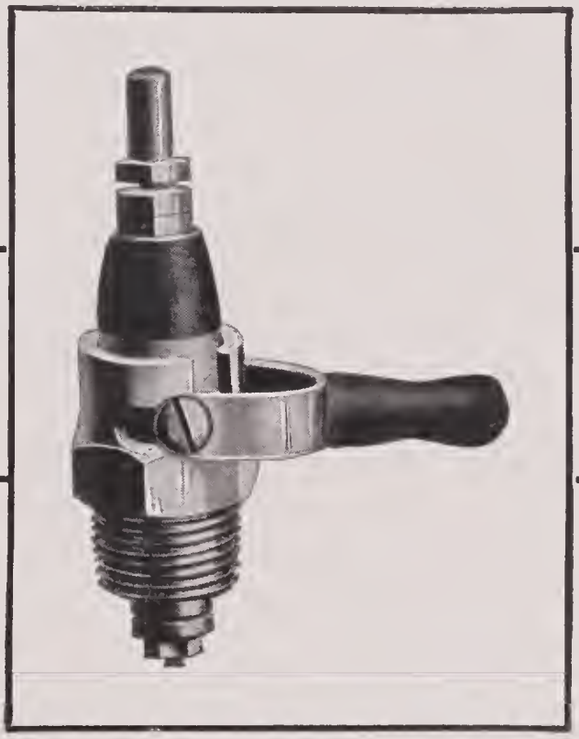
## DON'T SKIP

Only quick detachable plug containing both terminals in the detachable member.

Absolutely will not leak compression

Positively will not work loose.

PRICE
$1.75



"Absolutely Guaranteed"

Gives the hottest spark of any plug made.

Non-breakable insulation.

Adjustable spark gap—once adjusted, always adjusted.

---

You can't imagine the convenience of a detachable plug until you have used one, it gives you a chance to examine your spark without using a wrench.

FOR SALE BY ALL FIRST-CLASS DEALERS

## KNAPP-GREENWOOD COMPANY

1000 Boylston Street - - BOSTON, MASS.

# TABLE OF DISTANCES

| | Albany | Rensselaer | Schodack Center | Kinderhook | Stuyvesant Falls | Hudson | Blue Store | Upper Red Hook | Red Hook | Rhinebeck | Staatsburg | Hyde Park | Poughkeepsie | New York City |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Albany | | 1.0 | 7.3 | 20.9 | 24.5 | 33.5 | 43.0 | 49.8 | 52.5 | 58.2 | 64.2 | 68.3 | 74.4 | 149.8 |
| Rensselaer | 1.0 | | 6.3 | 19.9 | 23.5 | 32.5 | 42.0 | 48.8 | 51.5 | 57.2 | 63.2 | 67.3 | 73.4 | 148.8 |
| Schodack Center | 7.3 | 6.3 | | 13.6 | 17.2 | 26.2 | 35.7 | 42.5 | 45.2 | 50.9 | 56.9 | 61.0 | 67.1 | 142.5 |
| Kinderhook | 20.9 | 19.9 | 13.6 | | 3.6 | 12.6 | 22.1 | 28.9 | 31.6 | 37.3 | 43.3 | 47.4 | 53.5 | 128.9 |
| Stuyvesant Falls | 24.5 | 23.5 | 17.2 | 3.6 | | 9.0 | 18.5 | 25.3 | 28.0 | 33.7 | 39.7 | 43.8 | 49.9 | 125.3 |
| Hudson | 33.5 | 32.5 | 26.2 | 12.6 | 9.0 | | 9.5 | 16.3 | 19.0 | 24.7 | 30.7 | 34.8 | 40.9 | 116.3 |
| Blue Store | 43.0 | 42.0 | 35.7 | 22.1 | 18.5 | 9.5 | | 6.8 | 9.5 | 15.2 | 21.2 | 25.3 | 31.4 | 106.8 |
| Upper Red Hook | 49.8 | 48.8 | 42.5 | 28.9 | 25.3 | 16.3 | 6.8 | | 2.7 | 8.4 | 14.4 | 18.5 | 24.6 | 100.0 |
| Red Hook | 52.5 | 51.5 | 45.2 | 31.6 | 28.0 | 19.0 | 9.5 | 2.7 | | 5.7 | 11.7 | 15.8 | 21.9 | 97.3 |
| Rhinebeck | 58.2 | 57.2 | 50.9 | 37.3 | 33.7 | 24.7 | 15.2 | 8.4 | 5.7 | | 6.0 | 10.1 | 16.2 | 91.6 |
| Staatsburg | 64.2 | 63.2 | 56.9 | 43.3 | 39.7 | 30.7 | 21.2 | 14.4 | 11.7 | 6.0 | | 4.1 | 10.2 | 85.6 |
| Hyde Park | 68.3 | 67.3 | 61.0 | 47.4 | 43.8 | 34.8 | 25.3 | 18.5 | 15.8 | 10.1 | 4.1 | | 6.1 | 81.5 |
| Poughkeepsie | 74.4 | 73.4 | 67.1 | 53.5 | 49.9 | 40.9 | 31.4 | 24.6 | 21.9 | 16.2 | 10.2 | 6.1 | | 75.4 |
| New York City | 149.8 | 148.8 | 142.5 | 128.9 | 125.3 | 116.3 | 106.8 | 100.0 | 97.3 | 91.6 | 85.6 | 81.5 | 75.4 | |

# DETROIT and SOUTH BEND
## OR ANYWHERE

An *abundance* of *enjoyable features* along the road, but an *over abundance* of *menacing features on the road.* Chances are a *thousand* to *one* in favor of the *menacing features* winning out — unless you squelch them.

*You* know that a succession of punctures and blow-outs will spoil the effect of *any trip* and ruffle the temper of a Saint—besides—tearing *big* holes in the pocket-book.

The *best* move *you* can make, *before* taking *any* trip—a block or a thousand miles—is to have your tires treated with

# KEMIZITE

## *It Heals Punctures*

**The only absolute=harmless=permanent puncture healer**

***Guaranteed "Money Back" Basis***

| | |
|---|---|
| Clean — odorless | Only small quantity needed |
| Not a cement | Does not reduce resiliency |
| Not gummy | Does not interfere with vulcanization |
| Not sticky | Eliminates 75% of blow-outs |
| Not a filler | Increases mileage |

***Proportion — 5% Kemizite — 95% Air***

*Thousands* of auto owners are using *KEMIZITE* with *absolute satisfaction.* More down right enjoyment than they ever experienced with tires before, and at greatly *decreased* expense.

*This* is the move for *you* to make. No matter what you *remember* of the *past—do this now.* Investigate *KEMIZITE*—satisfy yourself. Remember a "money back" guarantee goes with it.

# AUTO TIRE=SECURITY COMPANY

**1231 Michigan Ave. = = = = Chicago**

# TABLE OF DISTANCES

| | New York City | Yonkers | Hastings | Dobbs Ferry | Irvington | Tarrytown | Ossining | Croton | Peekskill | Cold Spring | Fishkill Village | WappingersFalls | Poughkeepsie | Albany |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New York City | | 14.2 | 18.7 | 20.2 | 21.4 | 24.5 | 30.6 | 34.3 | 42.1 | 53.5 | 62.7 | 67.8 | 75.4 | 149.8 |
| Yonkers | 14.2 | | 4.5 | 6.0 | 7.2 | 10.3 | 16.4 | 20.1 | 27.9 | 39.3 | 48.5 | 53.6 | 61.2 | 135.6 |
| Hastings | 18.7 | 4.5 | | 1.5 | 2.7 | 5.8 | 11.9 | 15.6 | 23.4 | 34.8 | 44.0 | 49.1 | 56.7 | 131.1 |
| Dobbs Ferry | 20.2 | 6.0 | 1.5 | | 1.2 | 4.3 | 10.4 | 14.1 | 21.9 | 33.3 | 42.5 | 47.6 | 55.2 | 129.6 |
| Irvington | 21.4 | 7.2 | 2.7 | 1.2 | | 3.1 | 9.2 | 12.9 | 20.7 | 32.1 | 41.3 | 46.4 | 54.0 | 128.4 |
| Tarrytown | 24.5 | 10.3 | 5.8 | 4.3 | 3.1 | | 6.1 | 9.8 | 17.6 | 29.0 | 38.2 | 43.3 | 50.9 | 125.3 |
| Ossining | 30.6 | 16.4 | 11.9 | 10.4 | 9.2 | 6.1 | | 3.7 | 11.5 | 22.9 | 32.1 | 37.2 | 44.8 | 119.2 |
| Croton | 34.3 | 20.1 | 15.6 | 14.1 | 12.9 | 9.8 | 3.7 | | 7.8 | 19.2 | 28.4 | 33.5 | 41.1 | 115.5 |
| Peekskill | 42.1 | 27.9 | 23.4 | 21.9 | 20.7 | 17.6 | 11.5 | 7.8 | | 11.4 | 20.6 | 25.7 | 33.3 | 107.7 |
| Cold Spring | 53.5 | 39.3 | 34.8 | 33.3 | 32.1 | 29.0 | 22.9 | 19.2 | 11.4 | | 9.2 | 14.3 | 21.9 | 96.3 |
| Fishkill Village | 62.7 | 48.5 | 44.0 | 42.5 | 41.3 | 38.2 | 32.1 | 28.4 | 20.6 | 9.2 | | 5.1 | 12.7 | 87.1 |
| WappingersFalls | 67.8 | 53.6 | 49.1 | 47.6 | 46.4 | 43.3 | 37.2 | 33.5 | 25.7 | 14.3 | 5.1 | | 7.6 | 82.0 |
| Poughkeepsie | 75.4 | 61.2 | 56.7 | 55.2 | 54.0 | 50.9 | 44.8 | 41.1 | 33.3 | 21.9 | 12.7 | 7.6 | | 74.4 |
| Albany | 149.8 | 135.6 | 131.1 | 129.6 | 128.4 | 125.3 | 119.2 | 115.5 | 107.7 | 96.3 | 87.1 | 82.0 | 74.4 | |

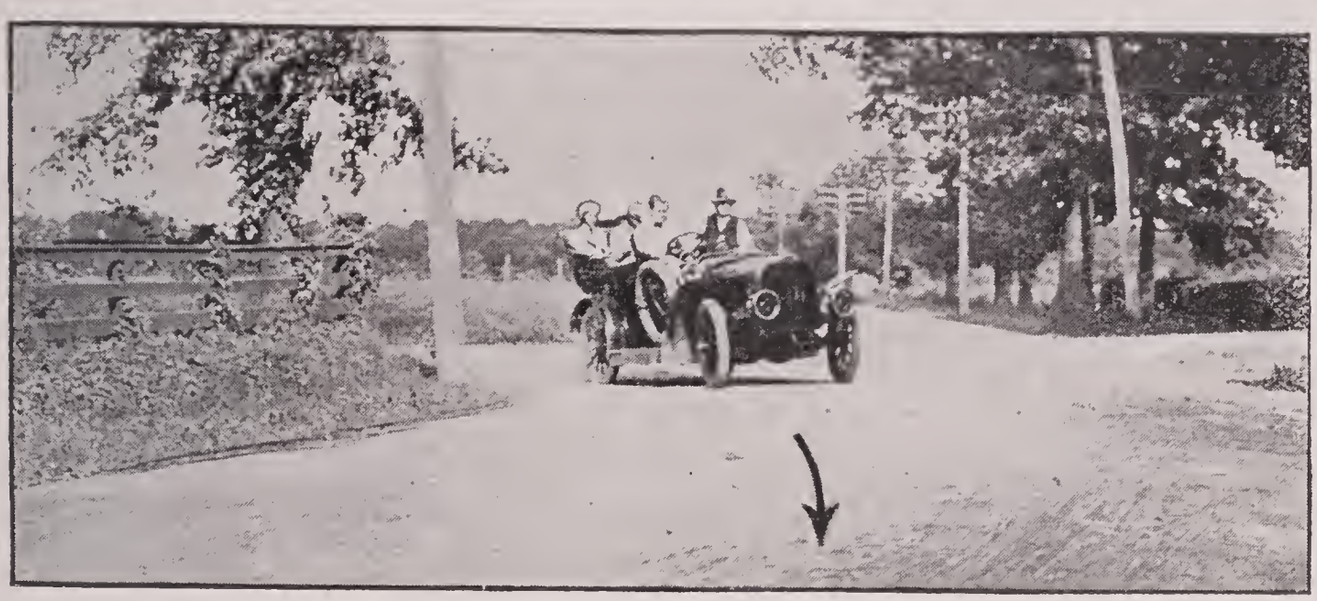
# Table of Mileage

| | | MILES |
|---|---|---|
| South Bend to | Lakeville | 10.5 |
| " " | Lapaz | 16.3 |
| " " | Plymouth | 24.5 |
| " " | Argos | 32.6 |
| " " | Rochester | 44.5 |
| " " | Perrysburg | 58.1 |
| " " | Mexico | 63.9 |
| " " | Peru | 69.8 |
| " " | Bunker Hill | 78.7 |
| " " | Miami | 82.5 |
| " " | Kokomo | 93.0 |
| " " | Sharpsville | 102.8 |
| " " | Tipton | 112.5 |
| " " | Atlanta | 118.4 |
| " " | Arcadia | 122.0 |
| " " | Cicero | 125.2 |
| " " | Noblesville | 131.5 |
| " " | Indianapolis | 155.2 |
| Indianapolis to | Noblesville | 23.7 |
| " " | Cicero | 30.0 |
| " " | Arcadia | 33.2 |
| " " | Atlanta | 36.8 |
| " " | Tipton | 42.7 |
| " " | Sharpsville | 52.4 |
| " " | Kokomo | 62.2 |
| " " | Miami | 72.7 |
| " " | Bunker Hill | 76.5 |
| " " | Peru | 85.4 |
| " " | Mexico | 91.3 |
| " " | Perrysburg | 97.1 |
| " " | Rochester | 110.7 |
| " " | Argos | 122.6 |
| " " | Plymouth | 130.7 |
| " " | Lapaz | 138.9 |
| " " | Lakeville | 144.7 |
| " " | South Bend | 155.2 |

# Table of Distances

| | MILES |
|---|---|
| South Bend to Lakeville | 10.5 |
| Lakeville to Lapaz | 5.8 |
| Lapaz to Plymouth | 8.2 |
| Plymouth to Argos | 8.1 |
| Argos to Rochester | 11.9 |
| Rochester to Perrysburg | 13.6 |
| Perrysburg to Mexico | 5.8 |
| Mexico to Peru | 5.9 |
| Peru to Bunker Hill | 8.9 |
| Bunker Hill to Miami | 3.8 |
| Miami to Kokomo | 10.5 |
| Kokomo to Sharpsville | 9.8 |
| Sharpsville to Tipton | 9.7 |
| Tipton to Atlanta | 5.9 |
| Atlanta to Arcadia | 3.6 |
| Arcadia to Cicero | 3.2 |
| Cicero to Noblesville | 6.3 |
| Noblesville to Indianapolis | 23.7 |

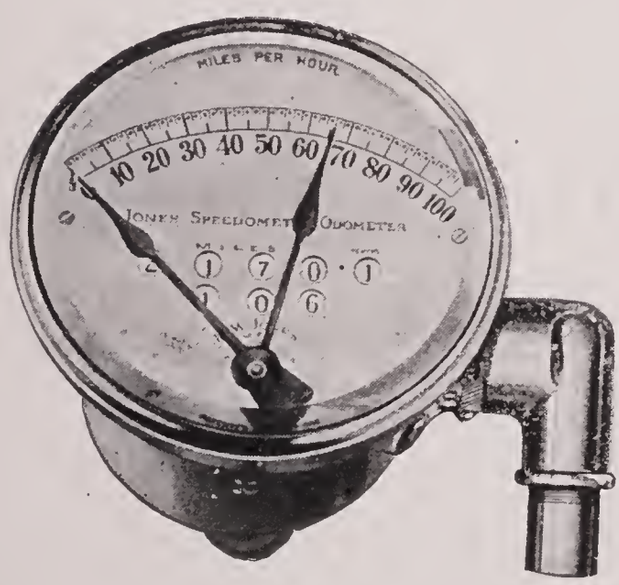
# TURN TO RIGHT AND STOP



If your car is not equipped with a reliable speed-indicator. No use touring without the famous

# JONES SPEEDOMETER

The BEST speed-indicator on the market. The PIONEER. The Winner of the R. A. C. Gold Medal for ACCURACY. The Jones is indispensable when touring because—it is absolutely reliable and dependable. It is used by the majority of motorists the world over. It is part equipment of practically every car on tour. See that you have a Jones on your dash. By means of the Odometer you can compute the distance cited on the maps—and you KNOW your speed at all times under all conditions.




*Write for folder containing illustrations and prices of all models.*

Jones Speedometer Dept.
United Manufacturers, Inc.
Broadway and 76th Street
New York

# Table of Distances

TOLEDO—DETROIT

| | MILES |
|---|---|
| Toledo to Erie | 11.1 |
| " " Monroe | 20.9 |
| " " Trenton | 41.7 |
| " " Wyandotte | 46.2 |
| " " Detroit | 57.0 |
| Detroit to Wyandotte | 10.8 |
| " " Trenton | 15.3 |
| " " Monroe | 36.1 |
| " " Erie | 45.9 |
| " " Toledo | 57.0 |
| Toledo to Erie | 11.1 |
| Erie to Monroe | 9.8 |
| Monroe to Trenton | 20.8 |
| Trenton to Wyandotte | 4.5 |
| Wyandotte to Detroit | 10.8 |

# Table of Mileage

ALBANY—SARATOGA SPRINGS

| | MILES |
|---|---|
| Albany to Cohoes | 12.2 |
| " " Waterford | 14.2 |
| " " Mechanicsville | 22.6 |
| " " Maltaville | 28.6 |
| " " Dunning Street | 30.8 |
| " " Saratoga Springs | 38.6 |
| Saratoga Springs to Dunning Street | 7.8 |
| " " " Maltaville | 10.0 |
| " " " Mechanicsville | 16.0 |
| " " " Waterford | 24.4 |
| " " " Cohoes | 26.4 |
| " " " Albany | 38.6 |

# Table of Distances

ALBANY—SARATOGA SPRINGS

| | MILES |
|---|---|
| Albany to Cohoes | 12.2 |
| Cohoes to Waterford | 2.0 |
| Waterford to Mechanicsville | 8.4 |
| Mechanicsville to Maltaville | 6.0 |
| Maltaville to Dunning Street | 2.2 |
| Dunning Street to Saratoga Springs | 7.8 |

# VIVAX
# STORAGE BATTERIES

6 VOLT 80 AMPERES
SPECIALLY BUILT FOR
LIGHTING PURPOSES

PRICE_____$24.00

WE GUARANTEE SATISFACTION

## Why The "VIVAX" Excells

Mechanical Strength; Perfect Insulation; Compact and Clean; No Corrosion of Terminals; Free from Mechanical Defects, or Faulty Workmanship.

The "VIVAX" Battery is especially built to withstand the constant jar of the Automobile and may be used on the heaviest truck or the lightest pleasure Vehicle.

## VIVAX IGNITION BATTERIES

6 Volt 60 Amperes_____$20.00
6 Volt Special_____ 15.00
6 Volt Junior_____ 11.50

Manufactured by

## VIVAX STORAGE BATTERY CO.

2224-2234 Michigan Avenue - CHICAGO, ILLINIOS

# Population of Towns

CHICAGO—SOUTH BEND

| | |
|---|---|
| Chicago . . . . | 2,049,185 |
| Hammond . . . | 15,956 |
| Highlands . . . | 25 |
| Hobart . . . . | 1,390 |
| Wheeler . . . . | 100 |
| Valparaiso . . . | 6,280 |
| Westville . . . | 468 |
| La Porte . . . . | 7,113 |
| New Carlisle . . . | 597 |
| South Bend . . . | 36,000 |

# Population of Towns

SOUTH BEND—TOLEDO

| | |
|---|---|
| South Bend | 36,000 |
| Mishawaka | 5,600 |
| Osceola | 1,000 |
| Dunlap | 200 |
| Goshen | 7,800 |
| Benton | 200 |
| Ligonier | 2,200 |
| Wawaka | 300 |
| Brimfield | 200 |
| Kendallville | 3,400 |
| Waterloo | 1,200 |
| Butler | 2,100 |
| Edgerton | 1,000 |
| Bryan | 3,100 |
| Stryker | 1,200 |
| Archbold | 1,000 |
| Wauseon | 2,100 |
| Delta | 1,200 |
| Swanton | 900 |
| Toledo | 131,000 |

# Population of Towns

TOLEDO—CLEVELAND

| | |
|---|---|
| Toledo | 131,000 |
| Genoa | 800 |
| Woodville | 800 |
| Hessville | 50 |
| Fremont | 8,500 |
| Clyde | 2,500 |
| Bellview | 1,000 |
| Monroeville | 1,200 |
| Norwalk | 7,000 |
| Townsend | 75 |
| Wakeman | 300 |
| Kipton | 100 |
| Oberlin | 4,000 |
| Elyria | 8,800 |
| Ridgeville | 200 |
| Dover | 50 |
| Cleveland | 381,800 |

# Population of Towns

CLEVELAND—BUFFALO

| | |
|---|---|
| Cleveland, O. | 381,768 |
| Willoughby, O. | 1,753 |
| Mentor, O. | 624 |
| Painesville, O. | 5,024 |
| Geneva, O. | 2,342 |
| Ashtabula, O. | 12,949 |
| Conneaut, O. | 7,133 |
| West Springfield, Pa. | 203 |
| East Springfield, Pa. | 591 |
| Girard, Pa. | 691 |
| Fairview, Pa. | 327 |
| Erie, Pa. | 52,733 |
| Wesleyville, Pa. | 567 |
| Harbour Creek, Pa. | 161 |
| North East, Pa. | 2,068 |
| Ripley, N.Y. | 810 |
| Westfield, N.Y. | 2,430 |
| Portland, N.Y. | 552 |
| Brocton, N.Y. | 900 |
| Fredonia, N.Y. | 4,127 |
| Sheridan, N.Y. | 100 |
| Silver Creek, N.Y. | 1,944 |
| Irving, N.Y. | 50 |
| Buffalo, N.Y. | 352,387 |

# Population of Towns

BUFFALO—SYRACUSE

| | |
|---|---|
| Buffalo | 352,387 |
| Snyder | 50 |
| Williamsville | 905 |
| Clarence | 670 |
| Pembroke | 310 |
| East Pembroke | 405 |
| Batavia | 9,180 |
| Byron | 342 |
| Bergen | 624 |
| Churchville | 505 |
| North Chili | 101 |
| Rochester | 162,608 |
| Pittsford | 1,000 |
| Egypt | 162 |
| Macedon | 592 |
| Palmyra | 1,937 |
| Port Gibson | 50 |
| Phelps | 1,306 |
| West Junius | 29 |
| Magee Corners | 61 |
| Auburn | 30,345 |
| Sennett | 403 |
| Elbridge | 549 |
| Camillius | 567 |
| Syracuse | 108,374 |

# Population of Towns

SYRACUSE—ALBANY

| | |
|---|---|
| Syracuse | 117,493 |
| De Witt | 2,509 |
| Fayetteville | 1,304 |
| Mycenae | 50 |
| Chittenango | 787 |
| Sulivan | 159 |
| Canastota | 3,030 |
| Oneida | 3,420 |
| Oneida Castle | 291 |
| Sherill | 230 |
| Vernon | 380 |
| Kirkland | 132 |
| New Hartford | 1,007 |
| Utica | 62,935 |
| Deerfield | 691 |
| West Shuyler | 261 |
| East Shuyler | 108 |
| Frankfort | 2,664 |
| Ilion | 5,138 |
| Herkimer | 5,555 |
| Little Falls | 11,122 |
| St. Johnsville | 1,873 |
| Nelliston | 634 |
| Palatine Bridge | 360 |
| Fonda | 1,145 |
| Amsterdam | 23,923 |
| Scotia | 361 |
| Schenectady | 58,369 |
| Albany | 98,370 |

# Population of Towns

## ALBANY—NEW YORK CITY

| | |
|---|---|
| Albany | 98,370 |
| Rensselaer | 10,715 |
| Schodack Center | 102 |
| Kinderhook | 913 |
| Stuyvesant Falls | 792 |
| Stockport | 481 |
| Stottville | 1,069 |
| Hudson | 10,290 |
| Blue Store | 134 |
| Upper Red Hook | 75 |
| Red Hook | 857 |
| Rhinebeck | 1,449 |
| Staatsburg | 479 |
| Hyde Park | 2,873 |
| Poughkeepsie | 25,379 |
| Wappingers Falls | 3,504 |
| Fishkill Village | 589 |
| Nelsonville | 624 |
| Cold Spring | 2,067 |
| Peekskill | 10,562 |
| Buchanan | 75 |
| Croton | 100 |
| Ossining | 7,939 |
| Tarrytown | 4,770 |
| Irvington | 2,231 |
| Dobbs Ferry | 2,888 |
| Hastings | 2,002 |
| Yonkers | 61,716 |
| New York City | 4,014,304 |

# Population of Towns

ALBANY—SARATOGA SPRINGS

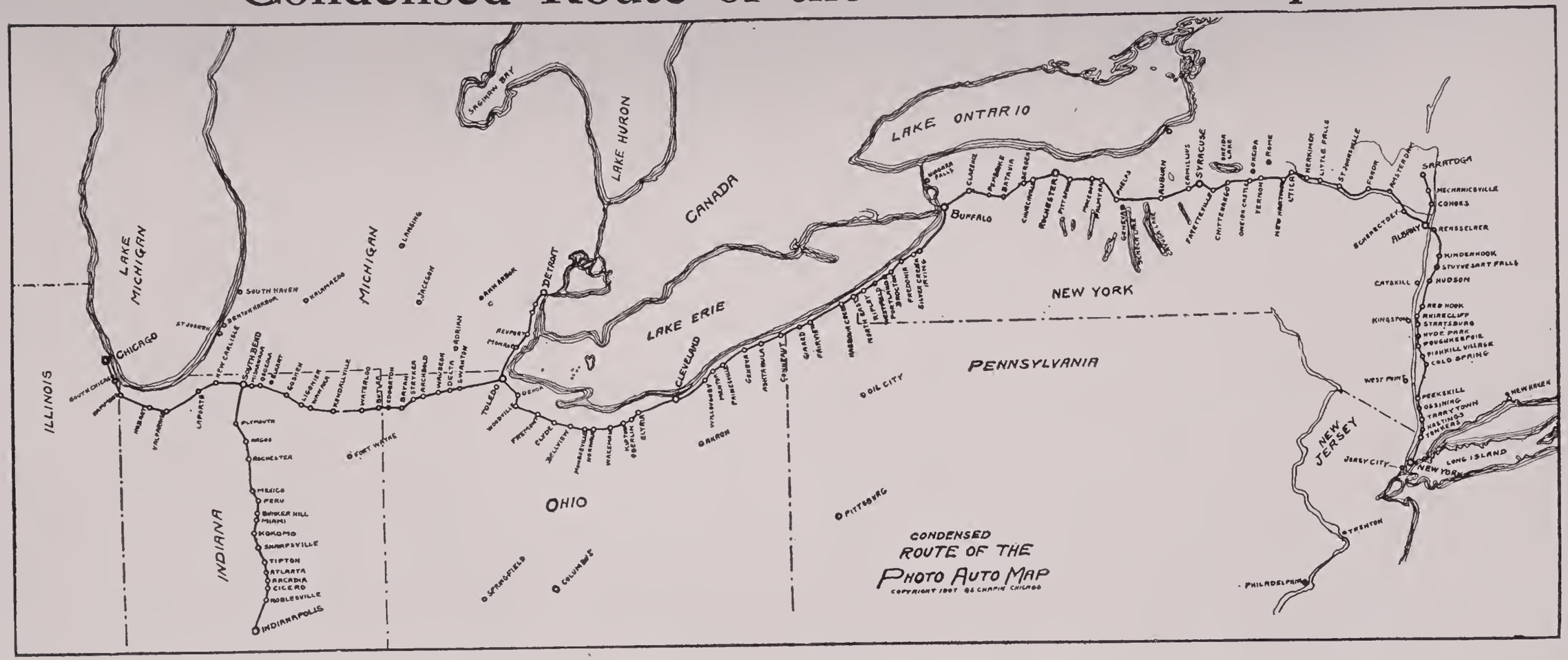
| | |
|---|---|
| Albany . . . . | 98,360 |
| Cohoes . . . . | 24,183 |
| Waterford . . . . | 3,146 |
| Mechanicsville . . . | 4,695 |
| Maltaville . . . . | 92 |
| Dunning Street . . . | 50 |
| Saratoga Springs . . | 12,538 |

# Population of Towns

SOUTH BEND—INDIANAPOLIS

| | |
|---|---|
| South Bend | 36,000 |
| Lapaz | 400 |
| Plymouth | 3,656 |
| Argos | 1,307 |
| Rochester | 3,421 |
| Perrysburg | 700 |
| Mexico | 500 |
| Peru | 11,648 |
| Bunker Hill | 568 |
| Miami | 390 |
| Kokomo | 12,019 |
| Sharpsville | 650 |
| Tipton | 3,764 |
| Atlanta | 1,500 |
| Arcadia | 1,413 |
| Cicero | 1,603 |
| Noblesville | 4,792 |
| Indianapolis | 219,154 |

# Condensed Route of the Photo-Auto Maps



# PHOTO-AUTO MAPS

No. 1

# NEW SOUTHERN HOTEL

MICHIGAN AVENUE AND 13th STREET, CHICAGO, ILL.

STARTING POINT of Photo-Auto Maps in Chicago, Ill. is The New Southern Hotel, situated so convenient to "Automobile Row," it is really considered the very best Hotel in Chicago for automobile tourists. A more delightful place for visitors in Chicago could not be conceived. Their every convenience and comfort is studiously provided for. Splendid Cafe, Restaurant and Grill Rooms in connection. Good garage accommodations may be had one block south of Hotel.

Memo.....

.....

.....

.....

.....

No. 2

Turn LEFT and go East from Michigan Avenue on 33rd Street. Next turn South Park Avenue, four-tenths of a mile.

Memo .....

No. 3

Turn RIGHT and go South to statue of Washington and entrance to Washington Park, two miles.

No. 4

WASHINGTON PARK

STRAIGHT AHEAD to Park Refectory Building, five-tenths of a mile.

No. 5

REFECTORY BUILDING ON RIGHT.

Turn LEFT, and keep right at first three drives on left. At administration buildings, with tall chimneys on left, turn right and keep ahead to extreme southeast corner of park; an amusement park adjoins on right.

Turn LEFT, leave park, crossing trolley on Cottage Grove Avenue, and continue due East upon Midway Drive pass under Illinois Central Railroad viaduct, straight ahead to Jackson Park. At red-tiled boat buildings ahead, upon entering park, turn right.

## Jackson Park

Turn LEFT, small police box on right. At next drive on left, turn right. At red-tiled rest building on right, turn right. At drive beyond building, turn left.

Memo.....

.....

.....

## Jackson Park

Turn RIGHT to Jeffrey Avenue. Lagoon on left. Three large chimneys can be seen some distance ahead on left after leaving park; real estate sign on right. Keep straight South upon Jeffrey Avenue. Next photo two miles.

No. 6

Turn LEFT on 83rd Street. Do not cross trolley on South Chicago Avenue on right. Follow 83rd Street to Baltimore Avenue at end of street. Next photo one mile.

Memo.....

.....

.....

.....

No. 7

Turn RIGHT, Baltimore Avenue. Next photo one block.

No. 8

Turn RIGHT, Exchange Avenue. Next photo at 92d Street, South Chicago, one mile.

Memo.....

.....

.....

.....

No. 9

Turn LEFT, 92d Street, South Chicago. Follow trolley to bridge. Next photo six-tenths of a mile.

No. 10

Turn RIGHT, cross bridge, follow trolley to sharp corner Avenue L. Leave trolley, keep ahead on macadam, looking out for high cross walks. Cross railroad at East Side Station on left. Turn left one short block, then right, turning left with trolley upon Indianapolis Avenue. Next photo one and two-tenths miles.

Memo .....

.....

.....

No. 11

Turn LEFT and go South-East. Ewing Avenue and Indianapolis Avenue. Next turn two and one-tenths miles.

No. 12

Turn RIGHT and go South. Next turn at car barns, three and nine-tenths miles.

Memo .....

.....

No. 13

Turn LEFT, East. Car barns on right, go one block East and turn to right, South, follow street car tracks to Sibley Street, Hammond, one and one-tenth miles. The Majestic Hotel Cafe is on Homan Avenue, one hundred feet north of Sibley Street, on left hand side of street. This cafe is open day and night and offers to automobile parties the parlor and toilet facilities of the Majestic Hotel which is first-class in every particular.

No. 14

HAMMOND

Turn LEFT, East. Turn left from Homan Avenue to Sibley Street. Half a block before turn, on the left side of the street is the Majestic Hotel and Cafe, the best in Hammond. Next turn one mile.

Memo .....

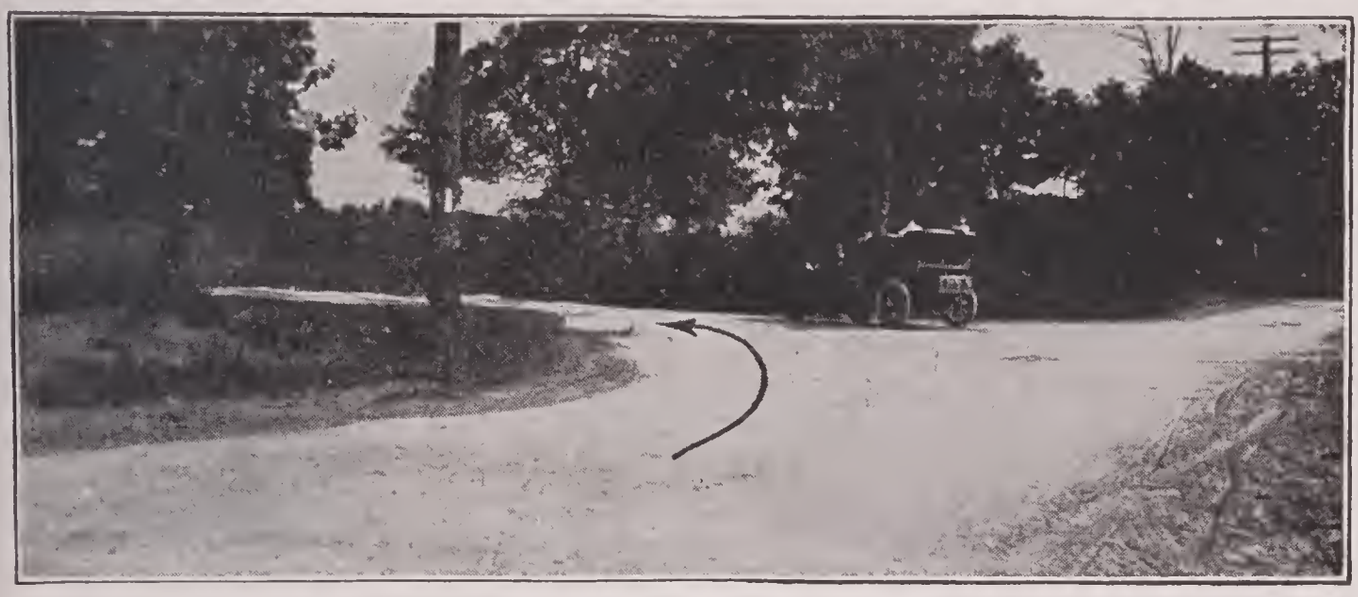
.....

.....

No. 15

Turn RIGHT, South, Lafayette School on left. Next turn one and three-tenths miles.

No. 16



Turn LEFT, East. All four corners vacant. Next turn five-tenths of a mile at ice house.

Memo .....

.....

.....

.....

.....

No. 17

Turn RIGHT, South. Saloon on left at turn. Next turn two and three-tenths miles.

## No. 18

Turn LEFT, East. Next turn at Highlands, two and three-tenths miles. Road to right and south leads to Crown Point and Cedar Lake.

Memo .....

.....

.....

## No. 19

HIGHLANDS

Turn RIGHT, South, then East. Go one hundred feet south, do not cross tracks, turn east passing factory and grocery. Next turn seven and nine-tenths miles.

No. 20

Turn LEFT, East. Follow wires. Next photo Hobart, three and two-tenths miles.

Memo .....

No. 21

HOBART

Turn LEFT, South. Next turn two-tenths of a mile.

No. 22

Turn LEFT, North-East. After passing R. R. depot, turn to right to street's end, then to left to street's end, then to right. Next photo three and six-tenths miles.

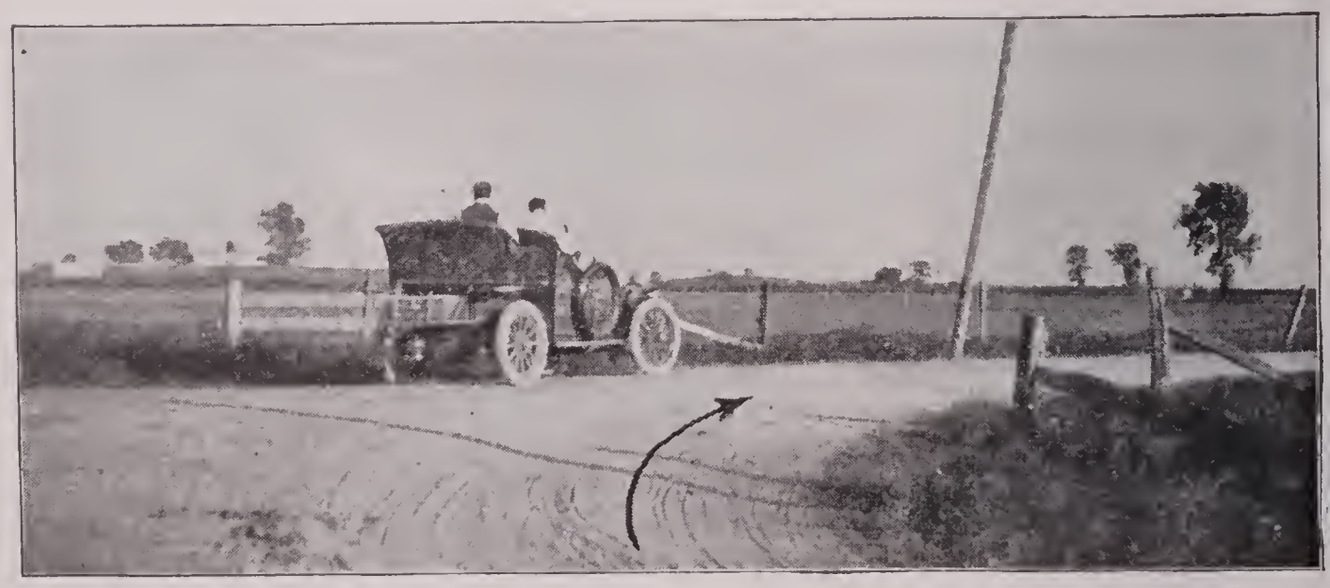
Memo .....

.....

.....

.....

No. 23



Turn RIGHT, South. Large barn on left. Follow wires Next turn one mile.

No. 24

Make "S" turn and continue going south. Follow wires. Next photo Wheeler, six-tenths of a mile.

Memo .....

.....

.....

.....

No. 25

WHEELER

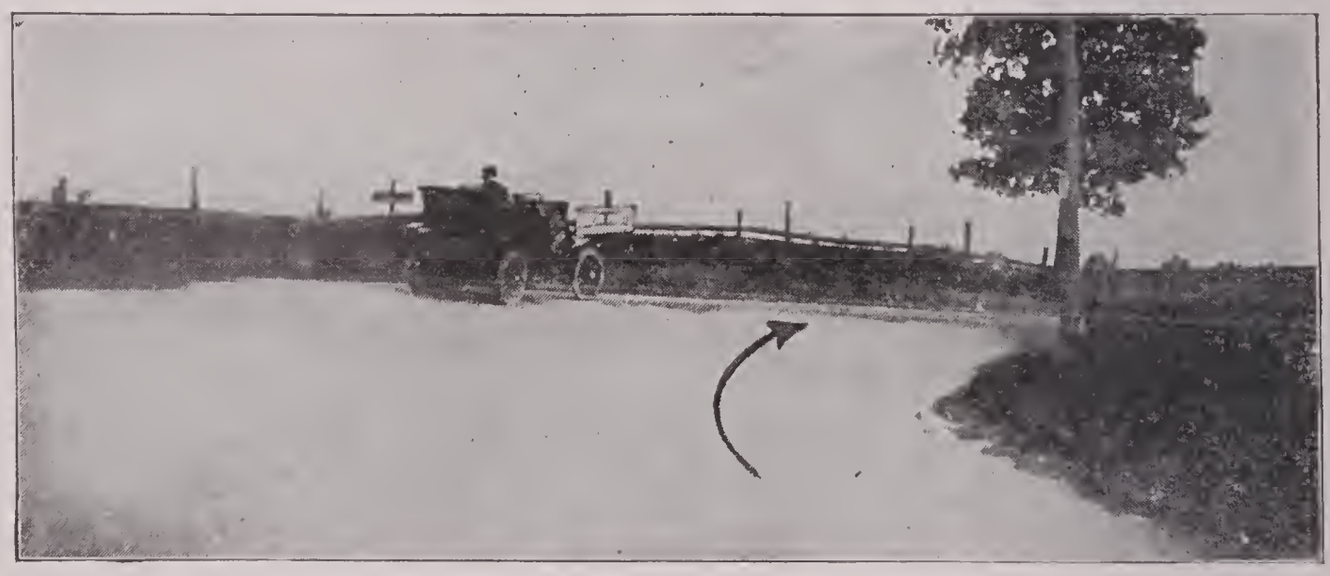
Turn LEFT, South-East. Next turn five-tenths of a mile. Reduce speed and avoid trouble with authorities.

No. 26

Turn RIGHT, leaving Wheeler on "S" turn, continuing East. Next photo four and seven-tenths miles at end of road.

Memo .....

No. 27



Turn RIGHT, South. Red barns and wind mill on right. Next turn two and three-tenths miles at Valparaiso.

No. 28

VALPARAISO

Turn RIGHT, East, Main Street, keep straight ahead through town. Next photo top of hill, one and two-tenths miles. HOTEL LAFAYETTE six tenths of a mile, on right side of street, one block this side of Court House. This hotel is the best between Chicago and South Bend. Special meal arrangements can be made by long distance telephone 991. One block before hotel is reached is Zimmerman's garage—expert machinists always ready for service. After hours ring bell on side office door.

No. 29

Turn RIGHT, South, go one hundred and fifty feet to next street, then turn left and east. Next turn two and six-tenths miles.

No. 30

Turn LEFT, North-East, cross roads. Next turn one and three-tenths miles, after crossing small bridge.

Memo .....

.....

.....

.....

.....

No. 31

Turn RIGHT, East, after crossing small bridge. Next photo at foot of sand hill, seven-tenths of a mile.

No. 32

STRAIGHT AHEAD, East. Next photo two-tenths of a mile at top of hill.

Memo .....

No. 33

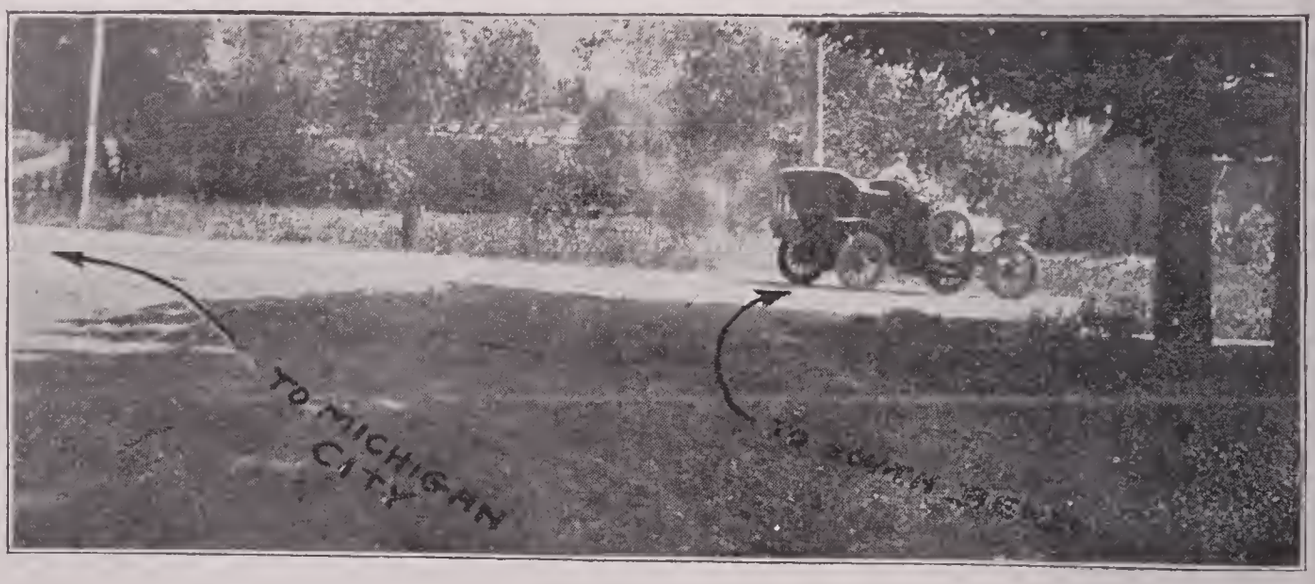
Take LEFT road. Next photo two miles.

No. 34

Take RIGHT hand road, North-East. Next photo leaving Westville three miles.

Memo .....

No. 35




WESTVILLE

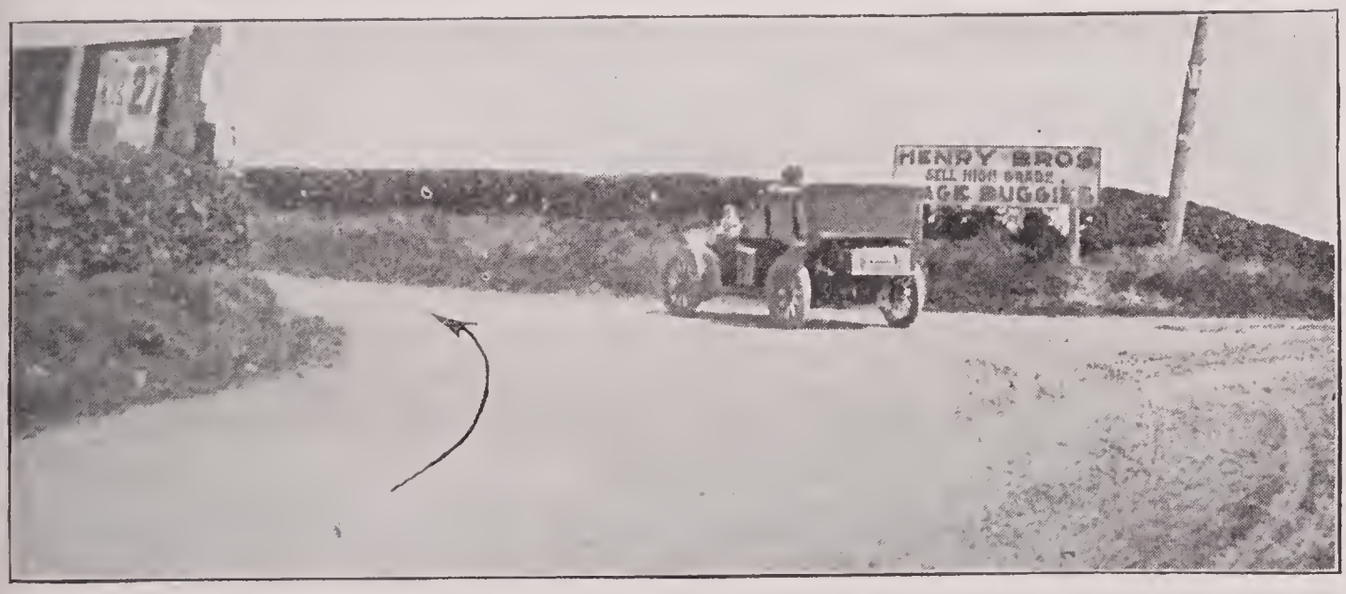
Turn RIGHT, South. Go one hundred and fifty feet and turn left and east. Next photo eight miles. The north and south road at photo 35 leads direct to Michigan City.

No. 36

STRAIGHT AHEAD, left road. Follow poles with most wires. Next photo one and three-tenths miles.

Memo .....

No. 37




Turn LEFT, North. Follow the wires. Next photo nine-tenths of a mile.

No. 38

Turn RIGHT, East. Small lake on left, half a block distant, large hole on left after turning. Go two blocks then turn left and straight ahead to Main Street. Go straight through town, passing Court House. Next photo three and two-tenths miles. For Automobile Maintenance Garage turn to right one block beyond Court House and go one half block. This garage is well equipped and is open day and night.

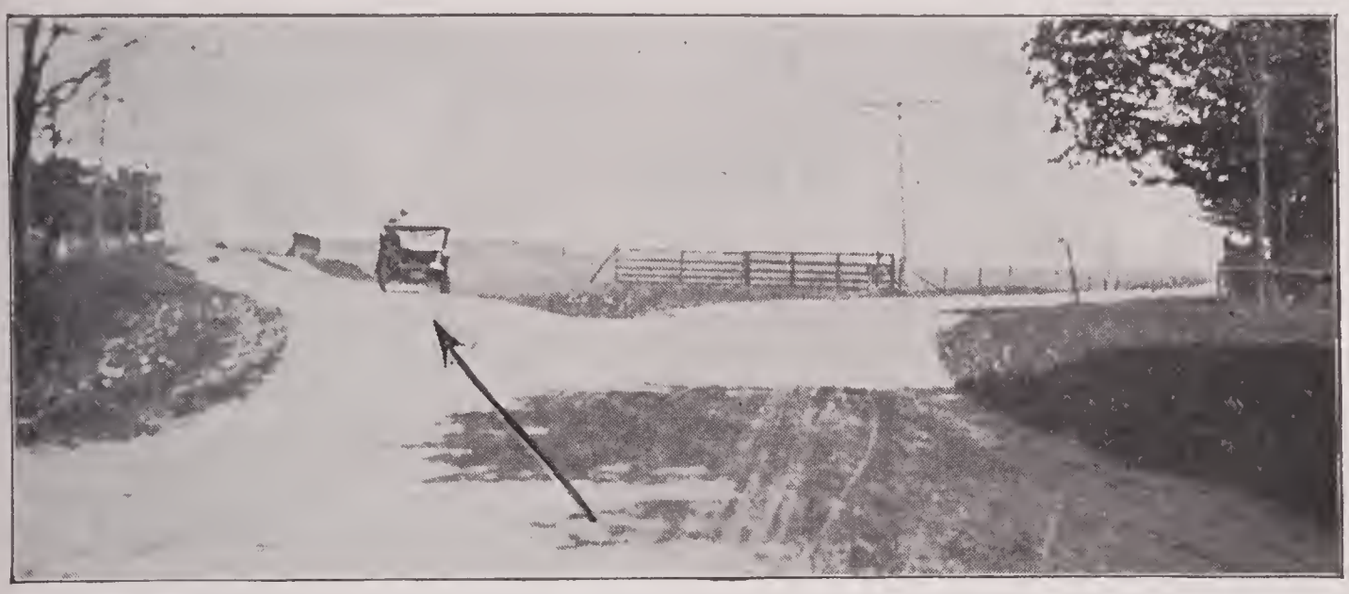
Memo .....

.....

No. 39

Take LEFT hand road. Follow poles with most wires. Next photo four and five-tenths miles.

No. 40



STRAIGHT AHEAD, North-East. Next photo South Bend twenty and five-tenths miles. Before coming to South Bend New Carlisle is passed, five and two-tenths miles. Follow the wires.

Memo .....

.....

.....

No. 41

SOUTH BEND

Turn RIGHT, South. Turn from La Salle Street into Main Street, go two blocks to Hotel Oliver.

No. 42

## HOTEL OLIVER, SOUTH BEND, IND.

This hotel is one of the best encountered between Chicago and New York. Every facility possible is provided for the comfort of its guests. Auto parties given special attention. Next photo (No. 43) at this corner.

Memo .....

## THE TWENTIETH CENTURY GARAGE

SOUTH BEND, IND.

Located one block west of Hotel Oliver, and half a block south on right-hand side of Lafayette Street. This garage is equipped with a first-class machine shop and special attention is given to tourists.

Memo .....

.....

.....

.....

No. 43

Turn LEFT from Main Street into Washington Street at Hotel Oliver. Next photo two blocks.

No. 44

Turn RIGHT and South-East from Washington Street into Vistula Avenue. Mishawaka four and five-tenths miles. Next photo seven and two-tenths miles.

Memo .....

.....

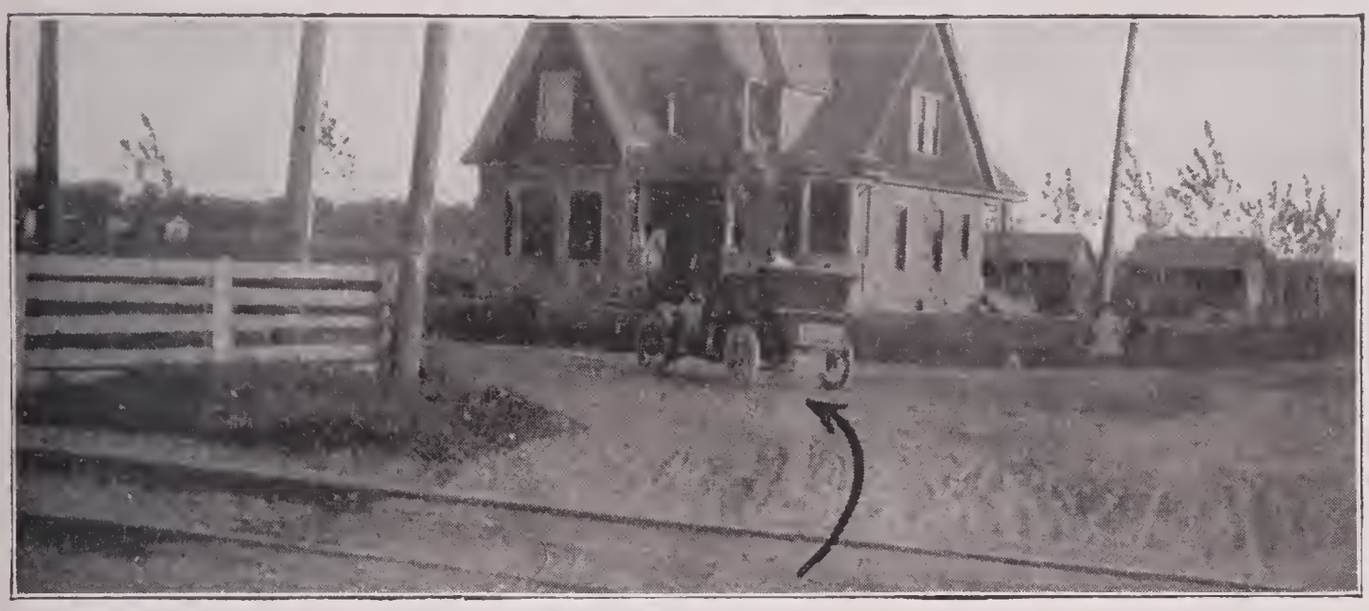
.....

.....

No. 45

Take RIGHT road at fork. Follow wires. Next photo in Osceola, two and nine-tenths miles.

No. 46



OSCEOLA

Turn RIGHT at end of road and cross tracks; then turn left and continue East. Dunlap eight and six-tenths miles. Next photo in Goshen, thirteen and seven-tenths miles.

Memo .....

.....

.....

No. 47

GOSHEN

Turn LEFT and cross bridge. Next photo at Main Street, four-tenths of a mile.

No. 48

GOSHEN

Turn RIGHT into Main Street. Follow the car tracks. Goshen Automobile Company garage one-half block—the best in Goshen for supplies and repairs. The Hascal Hotel one block—this is the best hotel in Goshen. Next photo five-tenths of a mile.

Memo .....

.....

No. 49

Turn LEFT and East from Main Street into Madison Street. Next photo at end of road, six-tenths of a mile.

No. 50

Turn RIGHT and South at end of road. Next photo five miles.

Memo .....

No. 51

Turn LEFT and South-East. Follow wires. Benton one and six-tenths miles. Next photo five and eight-tenths miles.

No. 52

Turn RIGHT and South. Follow wires. Next photo six-tenths of a mile.

Memo .....

.....

.....

.....

No. 53

Turn LEFT and East. School on left of turn. Follow most wires. Next photo in Ligonier, five and nine-tenths miles.

No. 54

LIGONIER

Turn RIGHT and South into Main Street. Next photo at fountain, three-tenths of a mile.

Memo .....

.....

.....

.....

No. 55

Take LEFT street at fountain. Next photo one-tenth of a mile.

No. 56

Turn LEFT from Main Street. Next photo at end of road, one and two-tenths miles.

Memo .....

.....

.....

.....

.....

No. 57

Turn RIGHT and South at end of road. Follow wires. Next photo two-tenths of a mile.

No. 58

Turn LEFT and East. Follow wires. Next photo at end of road, three and two-tenths miles.

Memo .....

.....

.....

.....

.....

No. 59

Turn RIGHT and South at end of road. Next photo in Wawaka, one and eight-tenths miles.

No. 60

WAWAKA

Turn RIGHT and South. Red brick church on left. Follow wires. Next photo seven-tenths of a mile.

Memo .....

.....

.....

.....

No. 61

Turn LEFT and East. Follow wires. Next photo at end of road, four and one-tenth miles.

No. 62

Turn LEFT at end of road and cross bridge; then turn right and continue East. Brimfield three-tenths of a mile. Next photo six and one-tenth miles.

Memo .....

.....

.....

.....

No. 63

Continue straight EAST on right-hand road. Leave wires. Next photo one and two-tenths miles.

No. 64

Turn RIGHT into Kendallville. Next photo six-tenths
a mile.

Memo .....

.....

.....

.....

No. 65

KENDALLVILLE

Turn LEFT from Main Street into Mitchell Street. Ne
photo at end of street, six-tenths of a mile.

No. 66

Turn LEFT and North at end of street. Next photo two-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 67

Turn RIGHT and East. Next photo three and three-tenths miles.

No. 68

Turn RIGHT and South. Follow wires. Sedan two miles. Next photo nine and four-tenths miles.

Memo .....

No. 69

Turn RIGHT and South entering Waterloo. Brick telephone station on left. Next photo, Waterloo, one mile.

No. 70

WATERLOO

Turn LEFT and East. Next photo at end of road, three and one-tenth miles.

Memo .....

.....

.....

No. 71

Turn LEFT and go fifty feet, then turn right and continue East. Follow wires. Next photo at end of road, one and seven-tenths miles.

No. 72

Turn LEFT at end of road and cross tracks. Follow wires Butler three and four-tenths miles. Next photo at end of road, six and five-tenths miles.

Memo .....

.....

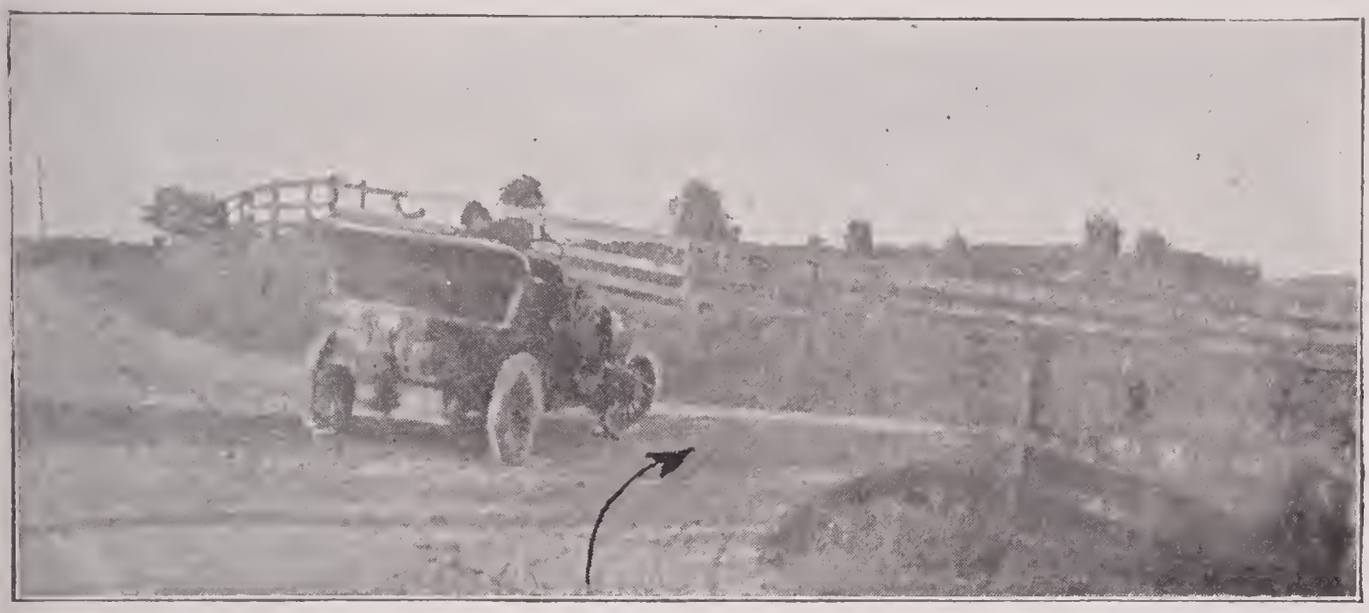
.....

.....

No. 73

Turn LEFT and North at end of road. Follow wires. Next photo five-tenths of a mile.

No. 74



Turn RIGHT and East just after crossing tracks. Next photo at end of road in Edgerton, three and six-tenths miles.

Memo .....

.....

.....

.....

No. 75

EDGERTON

Turn RIGHT and cross tracks; then turn left and continue East. Next photo at end of street, three-tenths of a mile.

No. 76

Turn LEFT at end of road. Go one hundred and fifty feet, turn right and continue East. Next photo at end of road, two and eight-tenths miles.

Memo .....

.....

.....

No. 77

Turn LEFT at end of road. Go one hundred and fifty feet, turn right and continue East. Next photo five and one-tenth miles.

No. 78

Turn LEFT and North. School house on right after turning. Next photo two and one-tenth miles.

Memo .....

.....

.....

.....

.....

No. 79

Turn RIGHT and North-East. School on left. Follow wires. Next photo in Bryan, one and six-tenths miles.

No. 80

BRYAN

Turn RIGHT and East. Church on left before turning. Next photo two blocks.

Memo .....

.....

.....

No. 81

Turn LEFT into Main Street. Court House on left. Hotel Christman, the best hotel in Bryan, two blocks on the left-hand side of the street. Next photo three blocks.

No. 82

Turn RIGHT and East one block north of Hotel Christman. Next photo at end of road, eight-tenths of a mile.

Memo .....

No. 83

Turn LEFT and North at end of road. Next photo two-tenths of a mile.

No. 84

Turn RIGHT and North-East. Next photo two and two-tenths miles.

Memo .....

.....

.....

.....

No. 85

Turn RIGHT and East. Follow wires. Stryker four and nine-tenths miles. Next photo at end of road, eight and seven-tenths miles.

No. 86

Turn LEFT at end of road. Go fifty feet, then turn right and continue East. Next photo at end of road, nine-tenths of a mile.

Memo .....

No. 87

Turn LEFT and North at end of road. Next photo one and five-tenths miles.

No. 88

Turn RIGHT and East just after crossing tracks. Next photo at end of road in Archbold, one mile.

Memo .....

.....

.....

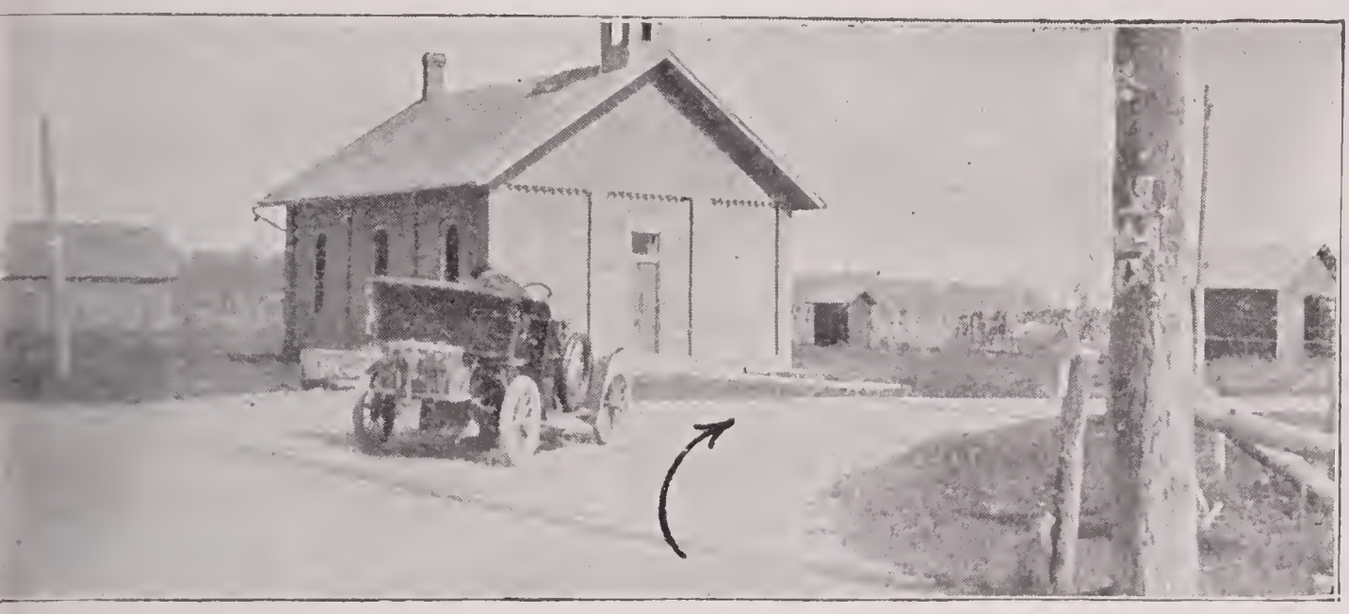
.....

No. 89

ARCHBOLD

Turn LEFT and North at end of road in Archbold. Next photo one and four-tenths miles.

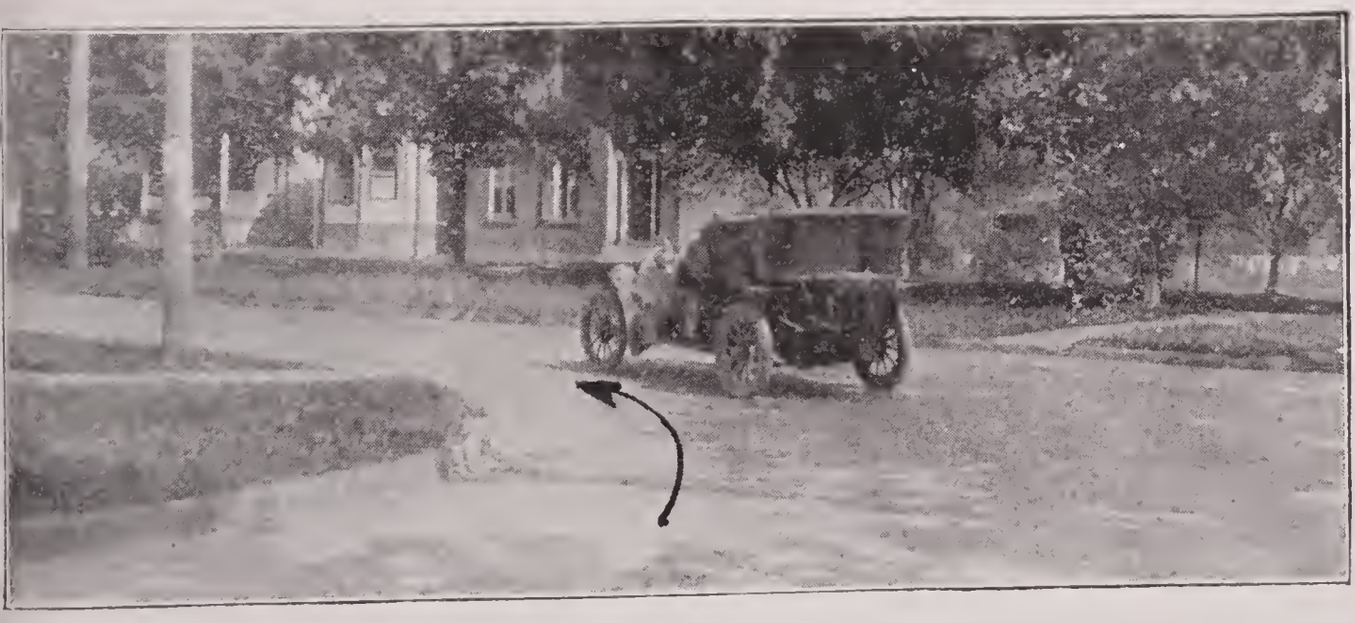
No. 90



Turn RIGHT and East. School on left of turn. Next photo in Wauseon, nine miles.

Memo .....

No. 91



WAUSEON

Turn LEFT and North into Main Street. Park on right before turning. Next photo at end of road, one mile.

No. 92

Turn RIGHT and East at end of road. Next photo at end of road three and six-tenths miles.

Memo .....

No. 93

Turn RIGHT at end of road. Cross tracks; then turn left and continue East. Next photo one mile.

No. 94

Turn LEFT and North. Schoolhouse on left, church on right. Next photo one mile.

Memo .....

.....

.....

.....

No. 95

Turn RIGHT and East into first road after crossing railroad tracks. Delta two and one-tenth miles. Next photo entering Swanton, nine and one-tenth miles.

No. 96

SWANTON

Turn LEFT and North entering Swanton. Next photo at end of road, two and nine-tenths miles.

Memo .....

.....

.....

.....

No. 97

Turn LEFT and West at end of road. Follow wires. Next photo five-tenths of a mile.

No. 98

Turn RIGHT and North. Follow the wires. Next photo two and eight-tenths miles.

Memo .....

No. 99

Turn RIGHT and East. Next photo three-tenths of a mile.

No. 100

Turn LEFT and North. Next photo one mile.

Memo .....

.....

.....

.....

.....

No. 101

Turn RIGHT and East. Large red brick church on right, cemetery on left. Next photo sixteen and five-tenths miles.

No. 102

Turn RIGHT and South-East. Follow wires. Next photo, Toledo, three and eight-tenths miles. Atwood's garage, one of the best in the west, is on the right-hand side of the street after entering the city.

Memo .....

.....

.....

No. 103

TOLEDO

Turn RIGHT from Monroe Street into St. Clair Street. Next photo two and one-half blocks.

No. 104

## THE TAVERN, TOLEDO, OHIO

STARTING POINT for run from Toledo to Cleveland. This is the best Hotel in Toledo for the accommodation of tourists. It is run on the European plan, with a fine Cafe and Grill Room in connection. Leave the Tavern on the RIGHT. Next photo (No. 105) two and one-half blocks.

Memo .....

.....

.....

## ATWOOD GARAGE

2815 MONROE ST., TOLEDO, OHIO

This is the best garage in Toledo. Sundries, repairing and charging. Leave the Tavern on the LEFT and go two and one-half blocks to Monroe Street. Turn right into Monroe Street and go straight ahead to the garage. Agents for the Franklin, Elmore and Pope-Hartford.

Memo

No. 105

Turn RIGHT from Summit Street into Cherry Street and cross bridge. Next photo six-tenths of a mile.

Memo .....

.....

.....

.....

No. 106

EAST TOLEDO

Turn LEFT from Main Street into Front Street. Next photo two blocks.

No. 107

Turn RIGHT from Front Street into Oswald Street. Next photo one and two-tenths miles.

Memo .....

No. 108

Turn LEFT from E. Broadway into Woodville Street. Next photo eleven and one-tenth miles.

## No. 109

Turn RIGHT with trolley line. Genoa eight-tenths of a mile Next photo three and two-tenths miles.

Memo .....

.....

.....

.....

.....

## No. 110

Turn slightly to right and leave trolley line. Next photo in Woodville, two and five-tenths miles.

## No. 111

## WOODVILLE

Turn LEFT and East into Main Street at end of road. Next photo leaving Woodville, three-tenths of a mile.

Memo .....

.....

.....

## No. 112

Keep to RIGHT and cross bridge leaving Woodville. Hessville seven and three-tenths miles. Fremont fourteen and one-tenth miles. Clyde twenty-three and one-tenth miles. Next photo in Bellview, thirty and seven-tenths miles.

No. 113

BELLVIEW

Turn RIGHT and South-East from Main Street. Next phot
at end of road seven and seven-tenths miles.

Memo .....

.....

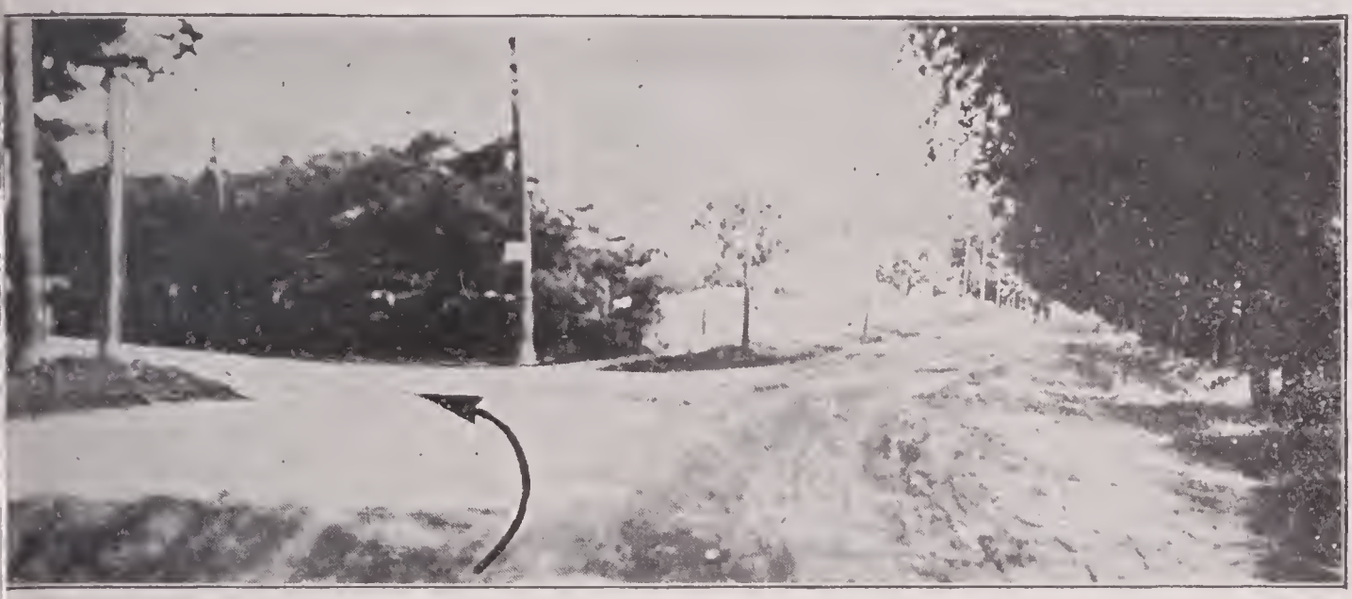
.....

.....

No. 114

Turn RIGHT and South at end of road. Next photo one-
tenth of a mile.

No. 115



Turn LEFT and South-East. Follow wires. Monroeville seven-tenths of a mile. Next photo one and one-tenth miles.

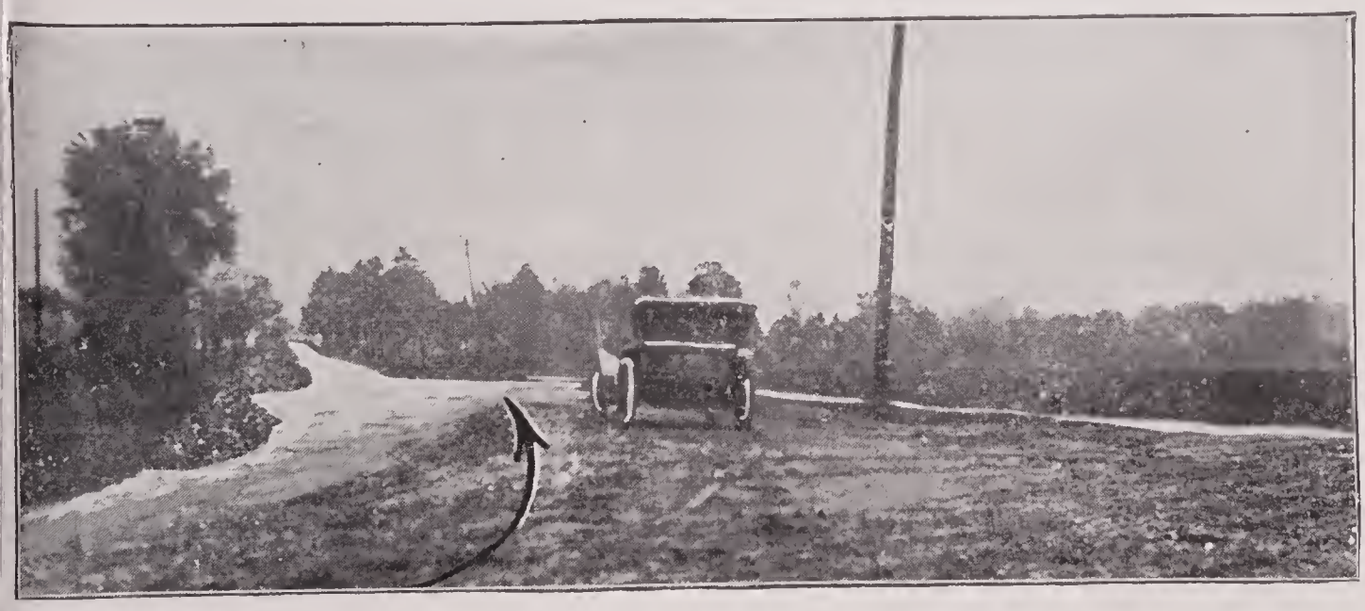
Memo .....

.....

.....

.....

No. 116



Turn LEFT and follow trolley line. Norwalk four and seven-tenths miles. Next photo leaving Norwalk, five and seven-tenths miles.

No. 117

NORWALK

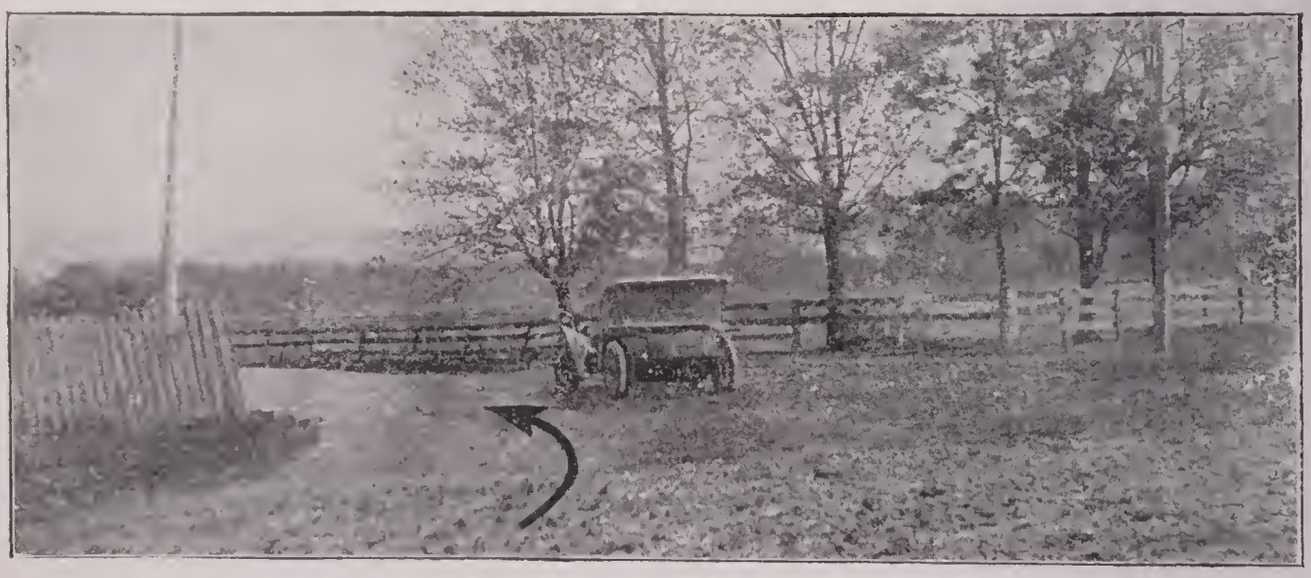
Take RIGHT road at fork and leave trolley. Townsend five and seven-tenths miles. Wakeman ten and two-tenths miles. Next photo fifteen and eight-tenths miles.

Memo .....

.....

.....

No. 118



Turn LEFT and North. White church on right before turning. Kipton two and two-tenths miles. Next photo three and six-tenths miles.

No. 119

Turn RIGHT and East. Next photo in Oberlin, four and five-tenths miles.

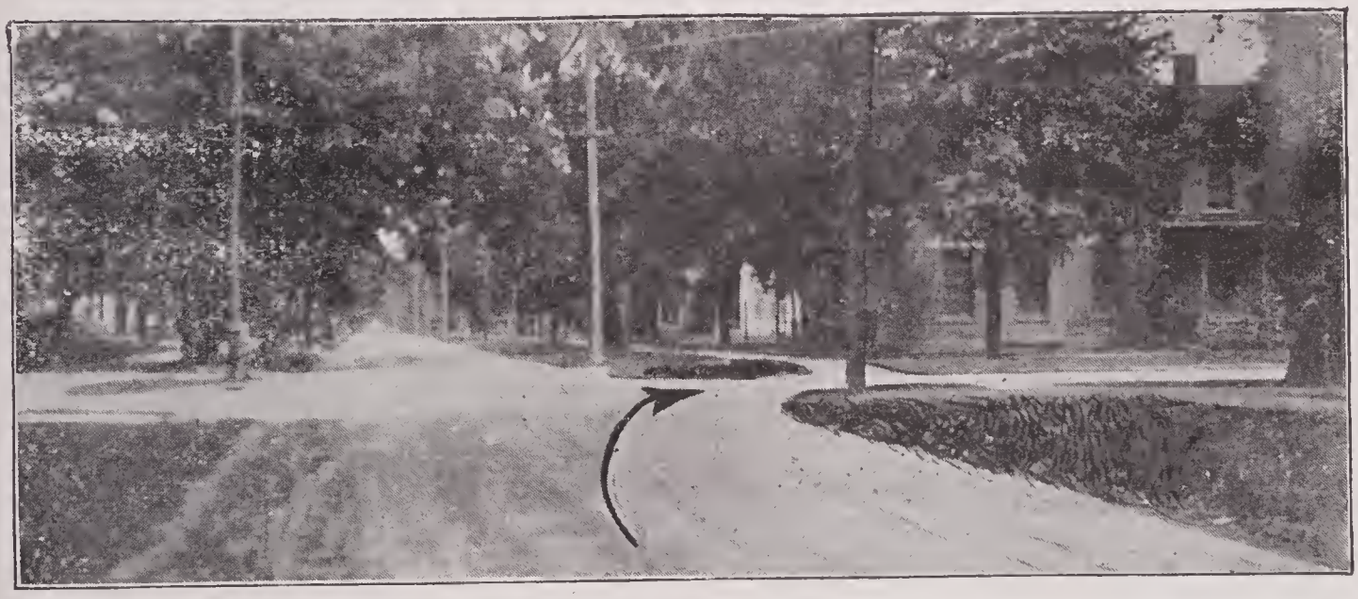
Memo .....

.....

.....

.....

No. 120



OBERLIN

Turn RIGHT and South from Lorain Street into Main Street. College buildings on left and park on right before turning. Next photo one block.

No. 121

Turn LEFT and East from Main Street into College Street. Next photo at end of road, two and five-tenths miles.

Memo .....

.....

.....

.....

.....

No. 122

Turn LEFT and North-East at end of road. Follow trolley line. Next photo three and seven-tenths miles.

No. 123

Turn RIGHT and follow wires. Next photo at end of road, six-tenths of a mile.

Memo .....

.....

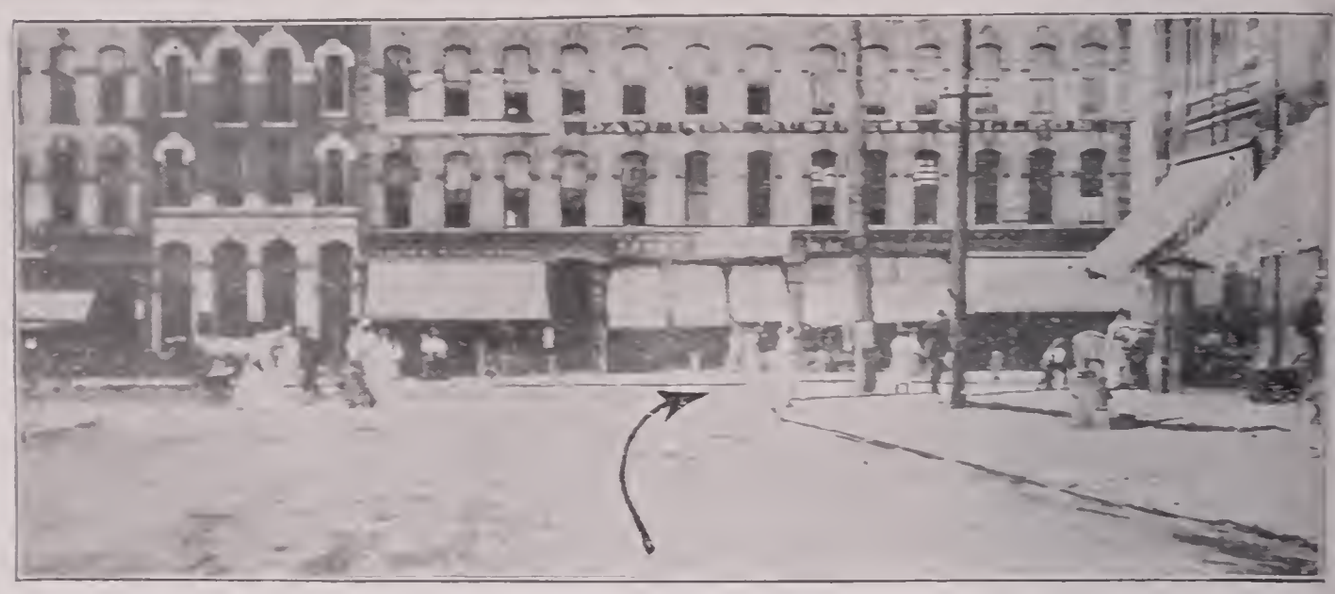
.....

.....

No. 124

Turn LEFT and North at end of road. Follow trolley line. Next photo at end of street in Elyria, two and four-tenths miles.

No. 125



ELYRIA

Turn RIGHT and East into Broad Street at end of Middle Avenue. Next photo four-tenths of a mile.

Memo .....

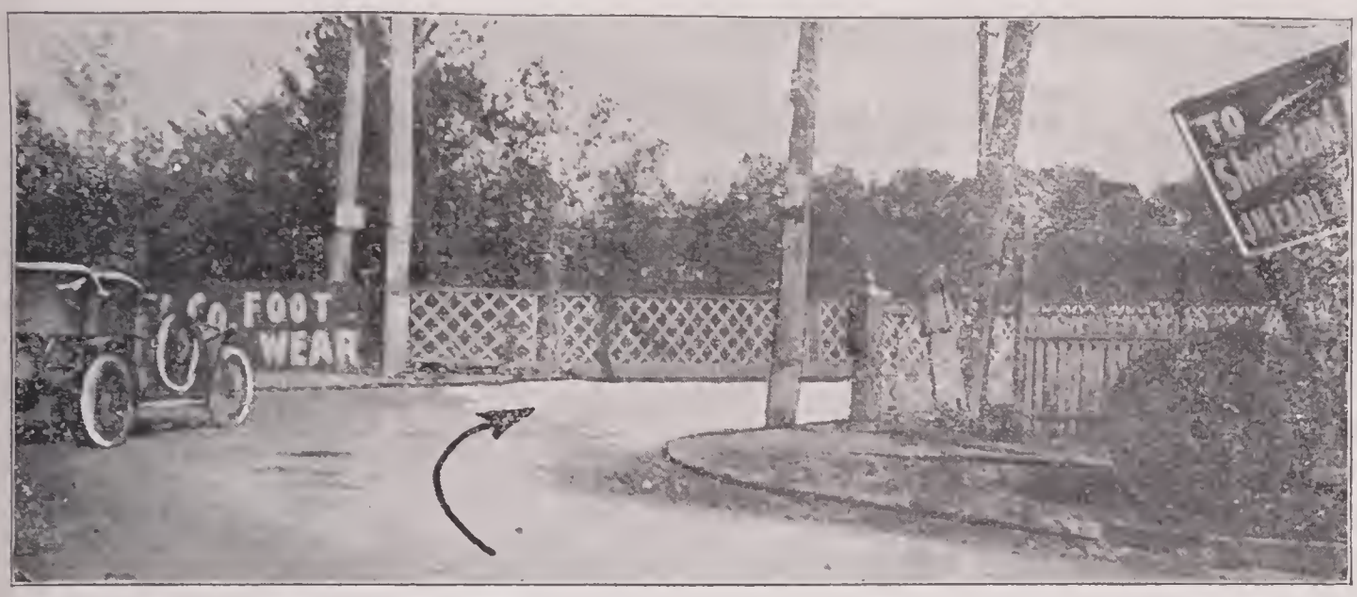
.....

.....

No. 126

Turn LEFT and North-East. Follow car tracks. Ridgevill four and four-tenths miles. Dover eleven and five-tenths miles. Next photo in West Cleveland, seventeen and four-tenths miles.

No. 127




Turn RIGHT and cross bridge. Next photo at end of street, four-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 128

Turn LEFT at end of street into Detroit Street. Next photo six and seven-tenths miles.

No. 129

Make "S" turn to LEFT from Detroit Street into Superior Street. Next photo at Square, one mile.

Memo .....

.....

.....

.....

No. 130

Turn RIGHT from Superior Street into Bright Street at Public Square. Follow street around two sides of square into Euclid Avenue. Next photo Hotel Euclid, six-tenths of a mile.

No. 131

# COLONIAL HOTEL, CLEVELAND, OHIO

From Superior Avenue and Public Square, go to Southeast end of Square where Euclid Avenue begins, then up Euclid Avenue to Sheriff Street, one-eighth of a mile, turn to right up Sheriff Street to Prospect Avenue, then left to Plate, Colonial Hotel. Leave Hotel on LEFT going east to Euclid Avenue and continue out Euclid Avenue to University Circle. (Plate).

Memo .....

No. 132

Turn LEFT at University Circle. Follow circle to first street with car tracks and turn left into Euclid Avenue. Euclid six and three-tenths miles. Wickliff ten miles. Next photo in Willoughby, fifteen miles.

Memo.....

No. 133

WILLOUGHBY

Turn RIGHT and East from Main Street. Large red brick house on left after turning. Mentor four and seven-tenths miles. Next photo in Painesville, eleven miles.

Memo .....

## No. 134

PAINESVILLE

Turn LEFT from Main Street with the car tracks. Nex photo two-tenths of a mile.

Memo .....

.....

.....

.....

## No. 135

Turn RIGHT at street where car tracks fork. Next phot six and two-tenths miles.

No. 136

Keep to LEFT at fork. North Madison five and nine-tenths miles. Geneva eleven and three-tenths miles. Next photo entering Ashtabula, twenty and six-tenths miles.

Memo .....

.....

.....

No. 137

ASHTABULA

Turn RIGHT and follow car tracks entering Ashtabula. Chapman House and garage on left before making next turn. Next photo at end of street, six-tenths of a mile.

No. 138

Turn LEFT at end of street. Next photo one block.

Memo .....

.....

.....

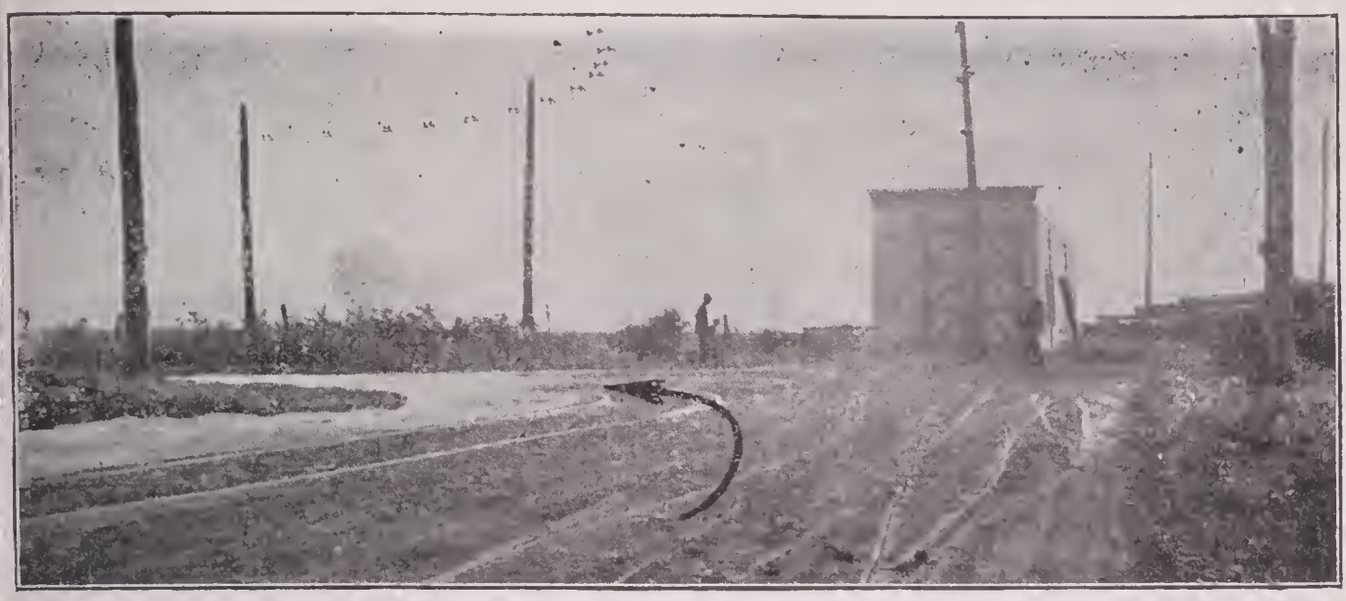
.....

.....

No. 139

Turn RIGHT and cross bridge. Next photo at end of road five-tenths of a mile.

No. 140



Turn LEFT and North at end of road. Next photo at square in village of Ashtabula, seven-tenths of a mile.

Memo .....

.....

.....

.....

No. 141

Turn RIGHT at square. Follow road around two sides of square and turn right into main road. Kingsville four and nine-tenths miles. Amboy nine and three-tenths miles. Next photo entering Conneaut, twelve and two-tenths miles.

No. 142

CONNEAUT

Turn RIGHT and follow car tracks into Conneaut. Go straigl through town. Next photo four and four-tenths miles.

Memo .....

.....

.....

.....

No. 143

Turn RIGHT and follow car tracks. West Springfield fiv miles. East Springfield nine and four-tenths miles. Nex photo eight and three-tenths miles.

No. 144

TRAIGHT AHEAD. West Girard one and six-tenths miles. Girard two and two-tenths miles. Fairview six and five-tenths miles. Next photo eight and seven-tenths miles.

emo .....

.....

.....

.....

No. 145

urn LEFT at fork and go down hill. DANGER! Go slow. Next photo in Erie, nine and four-tenths miles.

No. 146

ERIE

Turn LEFT from Twenty-sixth Street into Peach Stree
Next photo three-tenths of a mile.

Memo .....

No. 147

Turn RIGHT from Peach Street into Eighteenth Street. For main part of city and Reed House turn left at next corner. Go through park and turn right. Reed House on left, half a block after turning. H. T. Raser's garage one block to right on French Street, after passing Reed House.

For Buffalo go straight ahead after making turn in photo No. 147. Wesleyville four and one-tenth miles. Harbour Creek seven and nine-tenths miles. North East fifteen and one-tenth miles. Next turn at end of road, eighteen and eight-tenths miles.

Memo .....

## THE REED HOUSE, ERIE, PA.

This is the best and largest hotel in Erie. Centrally located in the heart of the business and shopping district. Special attention is given to tourists.

## H. T. RASER GARAGE

This is the best garage in Erie. Located on French Street, half a block from the Reed House. Repairs and supplies of all kinds.

No. 148

Turn LEFT at end of road and go down steep hill. DANGER! Go slow. Ripley five and two-tenths miles. Westfield twelve and two-tenths miles. Next photo at West Portland, fifteen and nine-tenths miles.

Memo .....

.....

.....

No. 149

Take LEFT fork at West Portland. Portland three and five-tenths miles. Brocton five and one-tenth miles. Fredonia twelve miles. Sheridan seventeen and two-tenths miles. Next photo in Silver Creek, twenty-four and one-tenth miles.

No. 150

SILVER CREEK

Turn RIGHT at Silver Creek. Silver Creek House offers the best accommodations for tourists. Next turn at top of hill, two-tenths of a mile.

Memo .....

.....

.....

.....

No. 151

Turn LEFT at top of hill. Next photo two and six-tenths miles.

No. 152

Turn LEFT and follow main road. Next photo in Irving, six-tenths of a mile.

Memo .....

.....

.....

.....

No. 153

IRVING

Turn LEFT and North. Next photo sixteen and six-tenths miles.

No. 154

Turn LEFT. Follow wires. Go one-tenth of a mile to end of road and turn left. Follow lake shore road to next photo entering Buffalo, eight and four-tenths miles.

Memo .....

.....

.....

.....

No. 155

BUFFALO

Turn RIGHT with car tracks opposite steel mill. Next photo across bridge, nine-tenths of a mile.

No. 156

Turn LEFT and enter park into first street after crossing bridge. Follow drive to greenhouse. Next photo leaving park, seven-tenths of a mile.

Memo.....

.....

.....

.....

No. 157

Turn RIGHT at greenhouse and follow boulevard to next photo, one and four-tenths miles.

No. 158

Take LEFT fork. Next photo nine-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 159

Take LEFT fork and turn right on leaving park. Next photo first street after leaving park.

No. 160

Turn LEFT from South Park Avenue into Abbot Road. Next photo one and seven-tenths miles.

Memo .....

.....

.....

.....

No. 161

Turn RIGHT with car tracks. Next photo second street after crossing double viaduct, four-tenths of a mile.

No. 162

Turn RIGHT from Elk Street into Hamburg Street. Tur
left at end of Hamburg Street into Swan Street. Nex
photo Main Street, one and six-tenths miles.

Memo .....

.....

.....

.....

No. 163

Turn RIGHT from Swan Street into Main Street. Iroquois
Hotel two blocks. "O. K." Garage one mile on right-hand
side of Main Street.

No. 164

## THE IROQUOIS HOTEL, BUFFALO, N. Y.

TARTING POINT for run from Buffalo to Albany. This is the best hotel in Buffalo for the accommodation of tourists. European plan and everything first-class. Located on Main Street, in the heart of the business and shopping district. Leave the hotel on the RIGHT and go North on Main Street. Snyder seven and eight-tenths miles. Williamsville nine and nine-tenths miles. Clarence eighteen and one-tenth miles. Pembroke twenty-six miles. East Pembroke thirty-two and six-tenths miles. Next photo in Batavia (photo No. 165), thirty-nine and six-tenths miles.

Memo .....

.....

.....

# STANDARD GARAGE CO.

1114-1116 MAIN STREET, BUFFALO, N. Y.

Leave the Iroquois Hotel and go SOUTH over Main St about one mile finding garage on left hand side of street number 1114-1116 Main St. The largest garage in Buffalo, open day and night for supplies and repairs. Absolutely fireproof. Special attention given to tourists.

Memo.....

.....

No. 165

BATAVIA

Turn LEFT and leave Main Street at end of car tracks. Next photo one and eight-tenths miles.

HOTEL RICHMOND, BATAVIA, N. Y.

e best hotel between Buffalo and Rochester. Special attention given to tourists. Hilts & Kennedy's new garage on opposite side of Main Street. Storage, supplies and repairs.

emo

No. 166

Turn LEFT and North. Roadhouse on right after turnin
Next photo eight-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 167

Turn RIGHT and East. Next photo at end of road, four
tenths of a mile.

No. 168

urn LEFT and North at end of road. Next photo at fork, seven-tenths of a mile.

emo

No. 169

ake RIGHT road at fork. Next photo at fork, five-tenths of a mile.

No. 170

Go STRAIGHT AHEAD on left-hand road at fork. Next photo three and seven-tenths miles.

Memo .....

.....

.....

.....

.....

No. 171

Turn RIGHT and East. Byron nine-tenths of a mile. Next photo six and two-tenths miles.

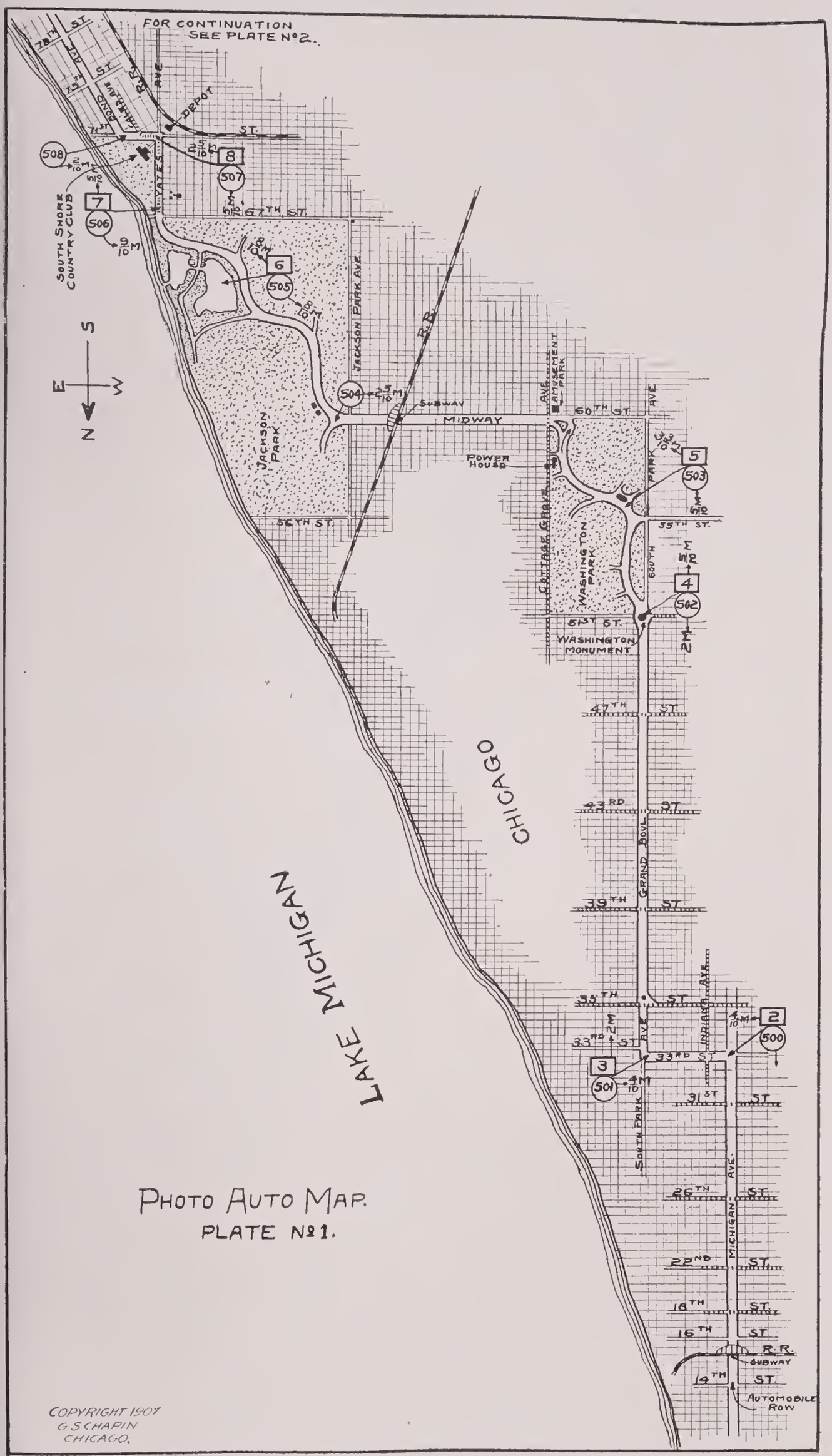



PHOTO AUTO MAP.
PLATE Nº 1.

COPYRIGHT 1907
G S CHAPIN
CHICAGO.

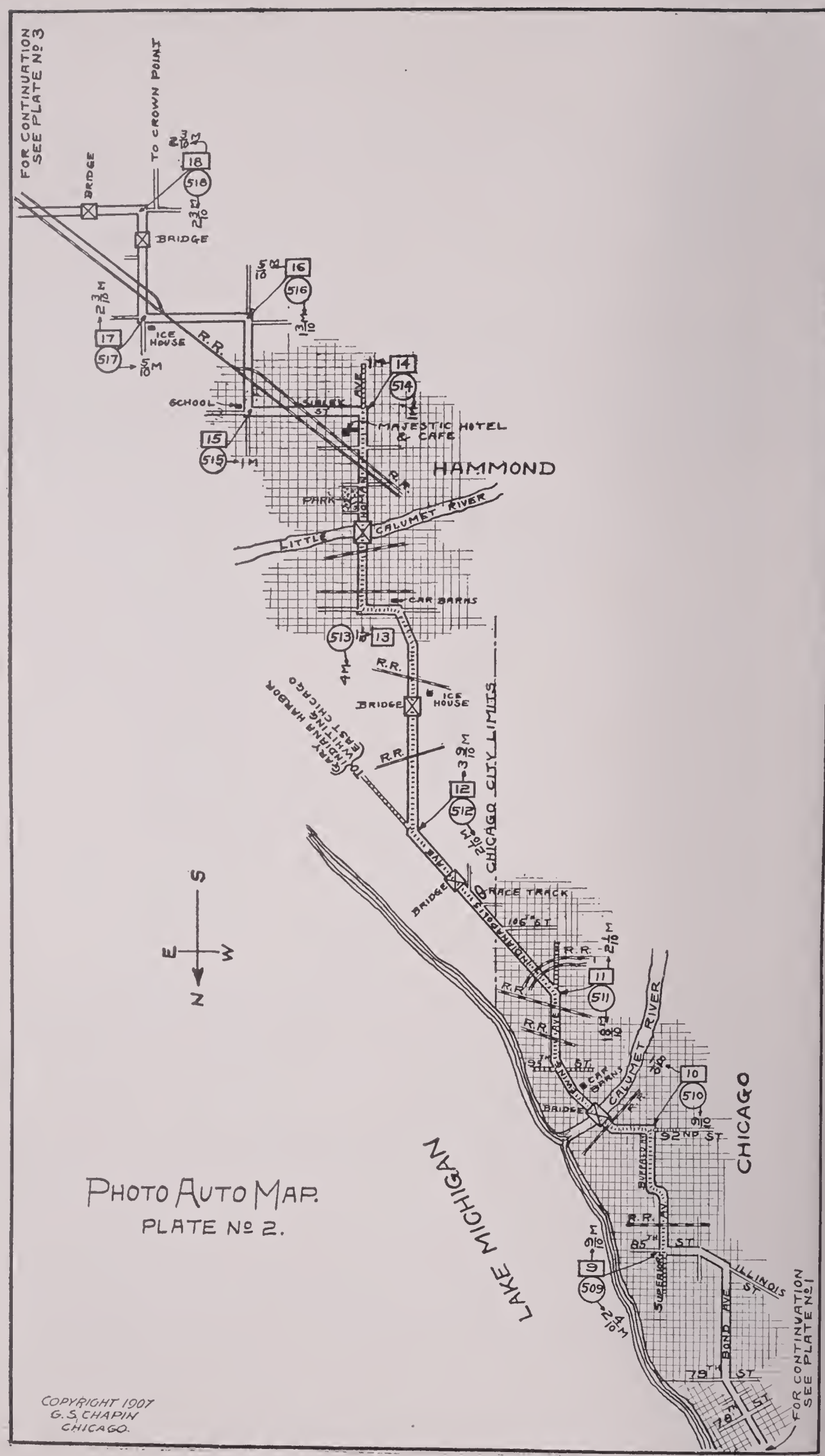
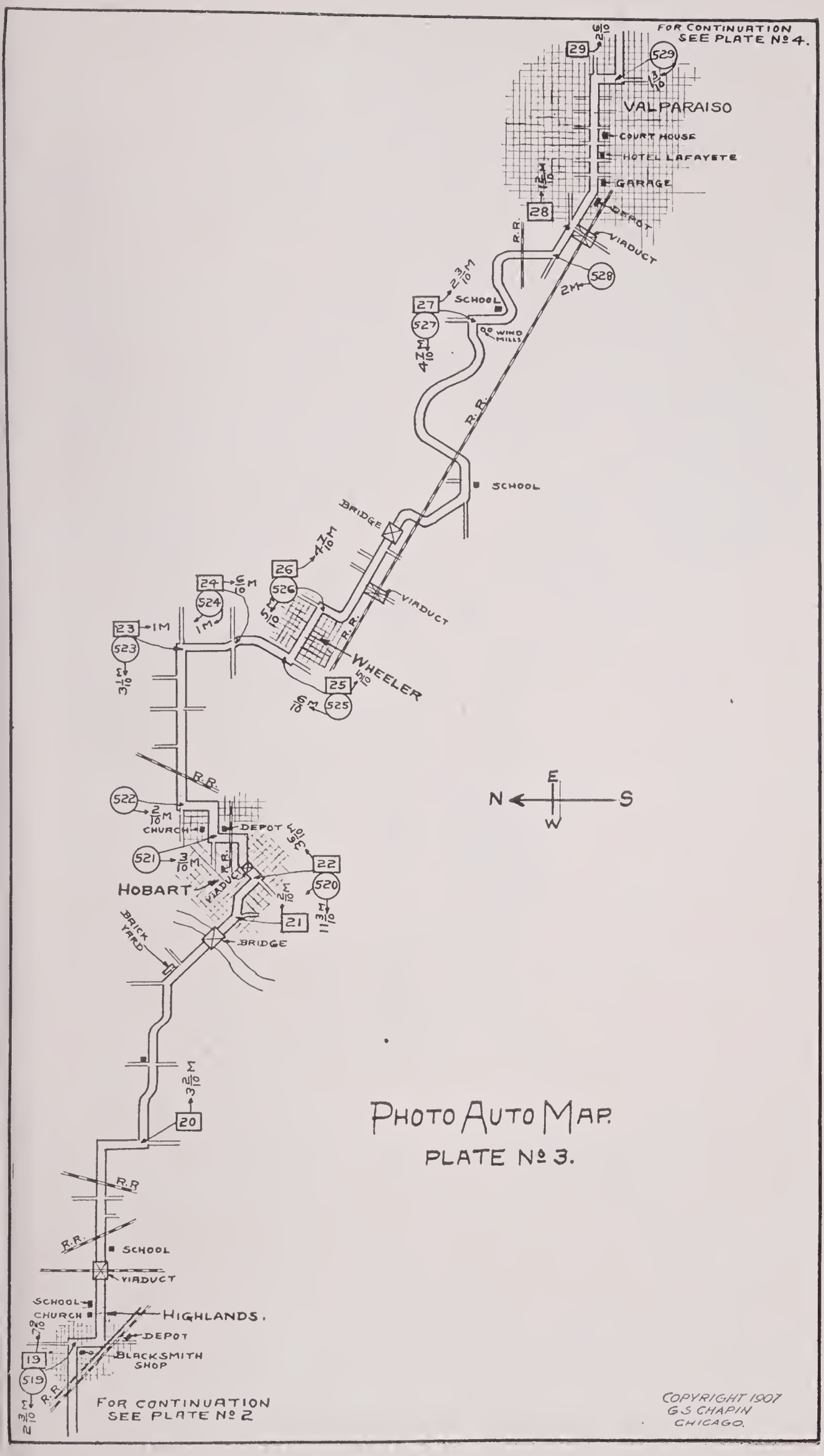



PHOTO AUTO MAP.
PLATE No 2.

COPYRIGHT 1907
G. S. CHAPIN
CHICAGO.




# PHOTO AUTO MAP.

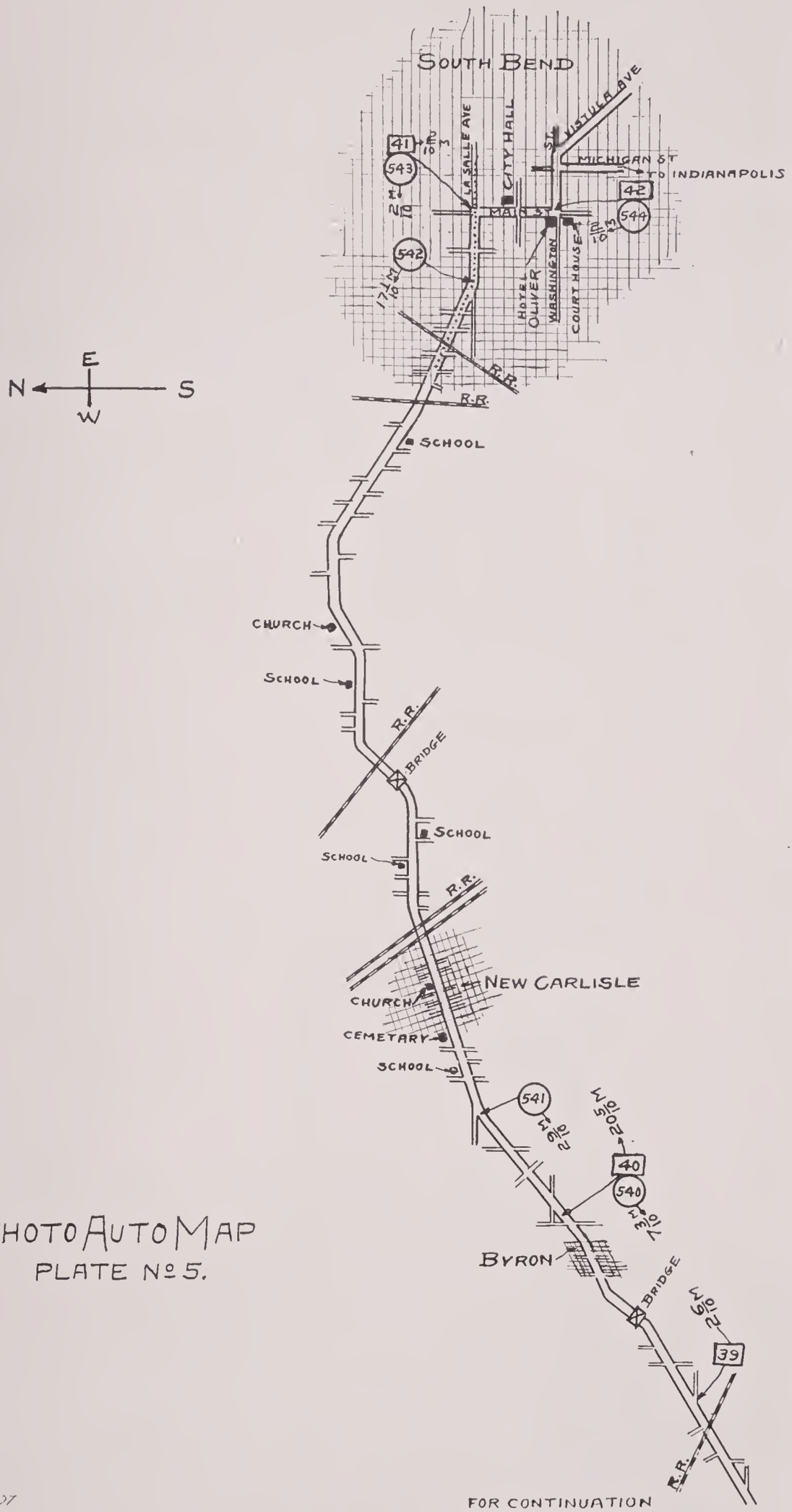
## PLATE No 3.

COPYRIGHT 1907
G S CHAPIN
CHICAGO.

# PHOTO AUTO MAP.

## PLATE No 4.

COPYRIGHT 1907
G S CHAPIN
CHICAGO




# PHOTO AUTO MAP
PLATE No. 5.

COPYRIGHT 1907
G.S. CHAPIN
CHICAGO

FOR CONTINUATION
SEE PLATE No. 4

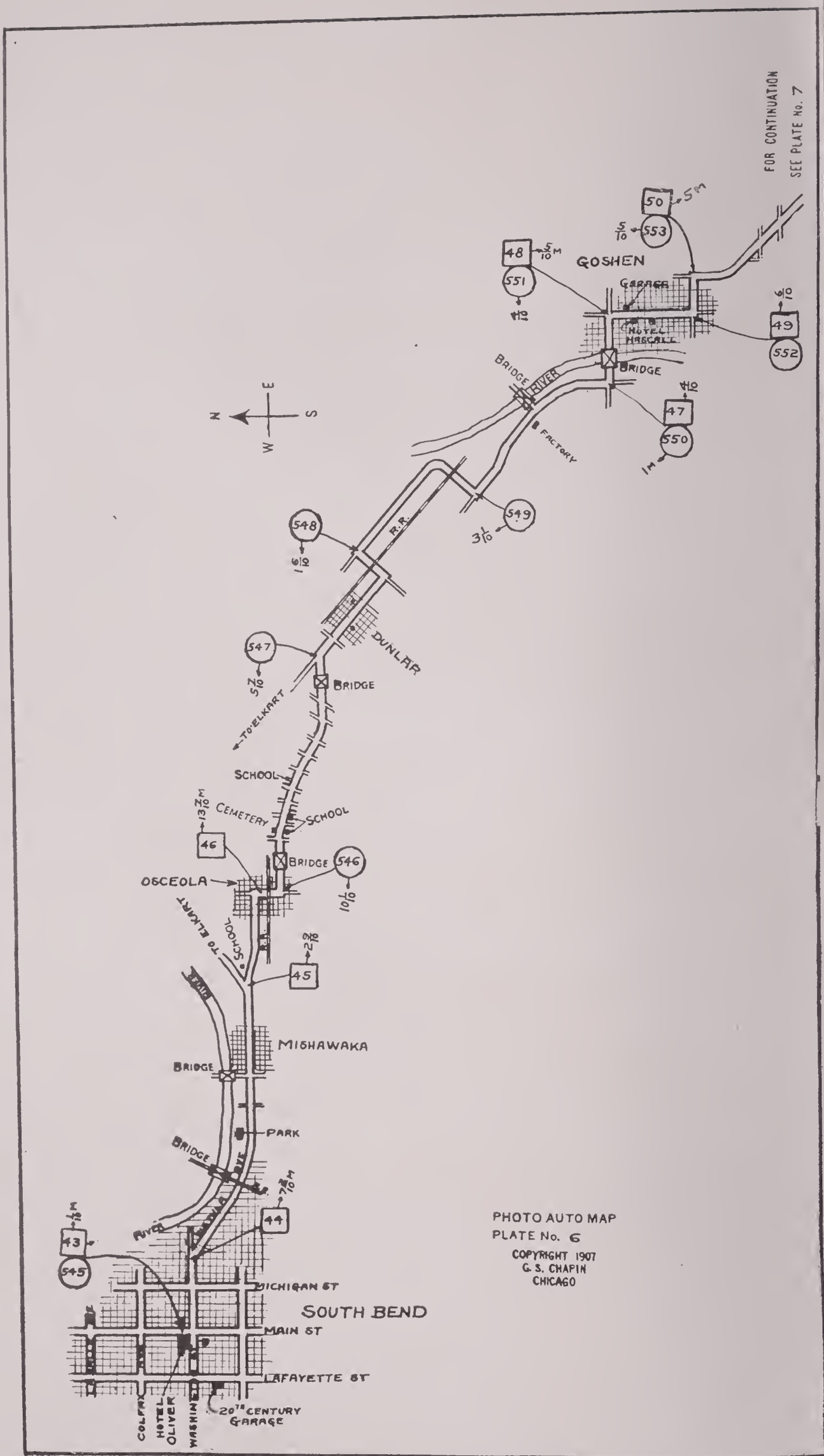
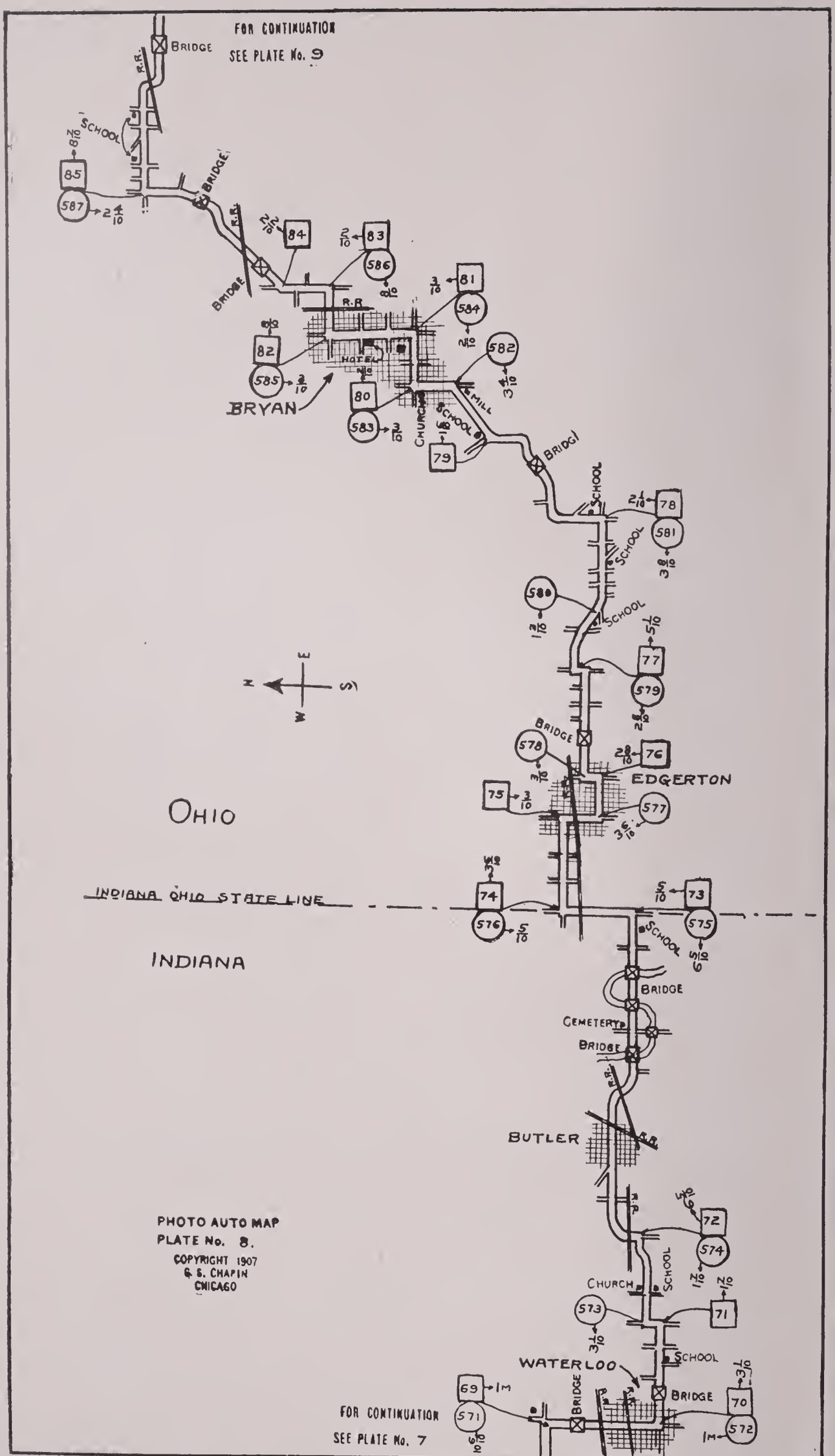

FOR CONTINUATION SEE PLATE No. 7
GOSHEN
GARAGE
HOTEL HAGGARTY
BRIDGE
BRIDGE RIVER
FACTORY
R.R.
DUNLAP
BRIDGE
TO ELKHART
SCHOOL
CEMETERY
SCHOOL
BRIDGE
OSCEOLA
TO ELKHART
SCHOOL
TRACK
MISHAWAKA
BRIDGE
PARK
BRIDGE
RIVER
MICHIGAN ST
SOUTH BEND
MAIN ST
LAFAYETTE ST
COLFAX
HOTEL OLIVER
WASHINGTON
20TH CENTURY GARAGE
N
S
E
W
PHOTO AUTO MAP
PLATE No. 6
COPYRIGHT 1907
G. S. CHAPIN
CHICAGO

PHOTO AUTO MAP
PLATE No. 7.

COPYRIGHT 1907
C. S. CHAPIN
CHICAGO


FOR CONTINUATION
SEE PLATE No. 9
BRIDGE
R.R.
SCHOOL
BRIDGE
R.R.
BRIDGE
R.R.
BRYAN
HOTEL
CHURCH
SCHOOL
MILL
BRIDGE
SCHOOL
SCHOOL
SCHOOL
EDGERTON
BRIDGE
OHIO
INDIANA OHIO STATE LINE
INDIANA
SCHOOL
BRIDGE
CEMETERY
BRIDGE
R.R.
BUTLER
R.R.
CHURCH
SCHOOL
WATERLOO
SCHOOL
BRIDGE
BRIDGE
FOR CONTINUATION
SEE PLATE No. 7
PHOTO AUTO MAP
PLATE No. 8.
COPYRIGHT 1907
G. S. CHAPIN
CHICAGO

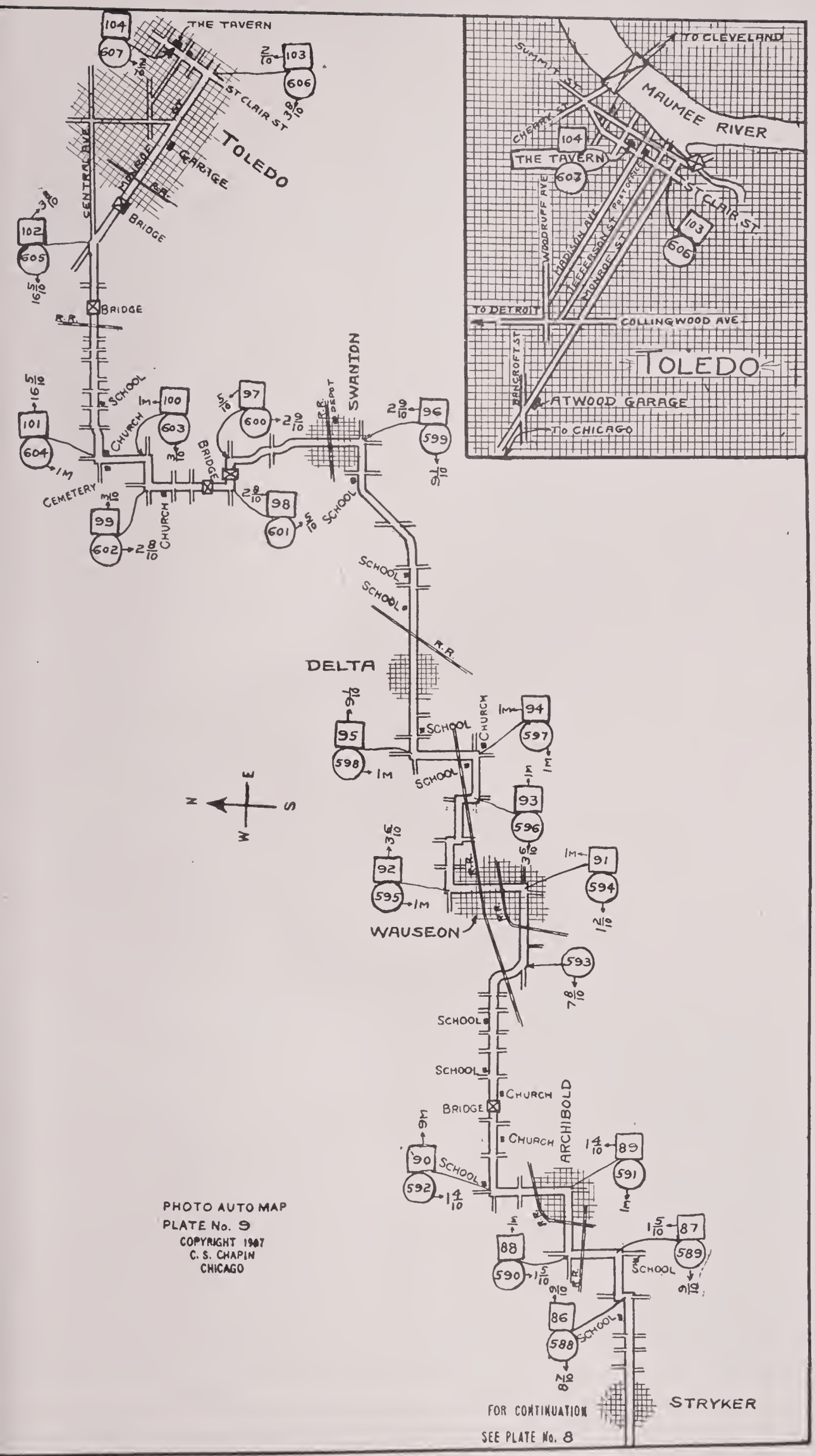
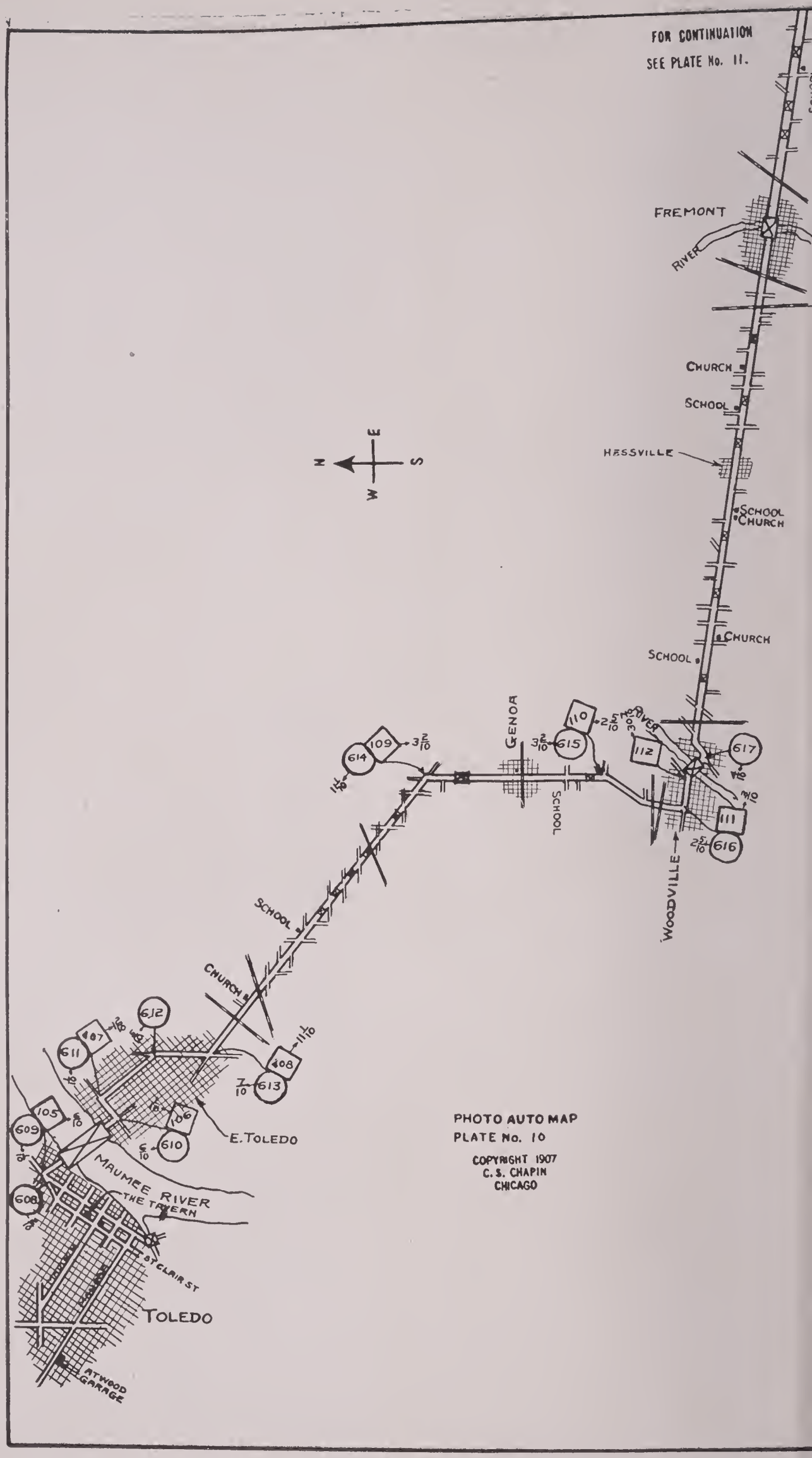



PHOTO AUTO MAP
PLATE No. 9
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO


FOR CONTINUATION
SEE PLATE No. 11.
FREMONT
RIVER
CHURCH
SCHOOL
HESSVILLE
SCHOOL
CHURCH
CHURCH
SCHOOL
N
E
S
W
GENOA
SCHOOL
RIVER
WOODVILLE
SCHOOL
CHURCH
E. TOLEDO
MAUMEE RIVER
THE TAVERN
ST CLAIR ST
TOLEDO
ATWOOD GARAGE
PHOTO AUTO MAP
PLATE No. 10
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO

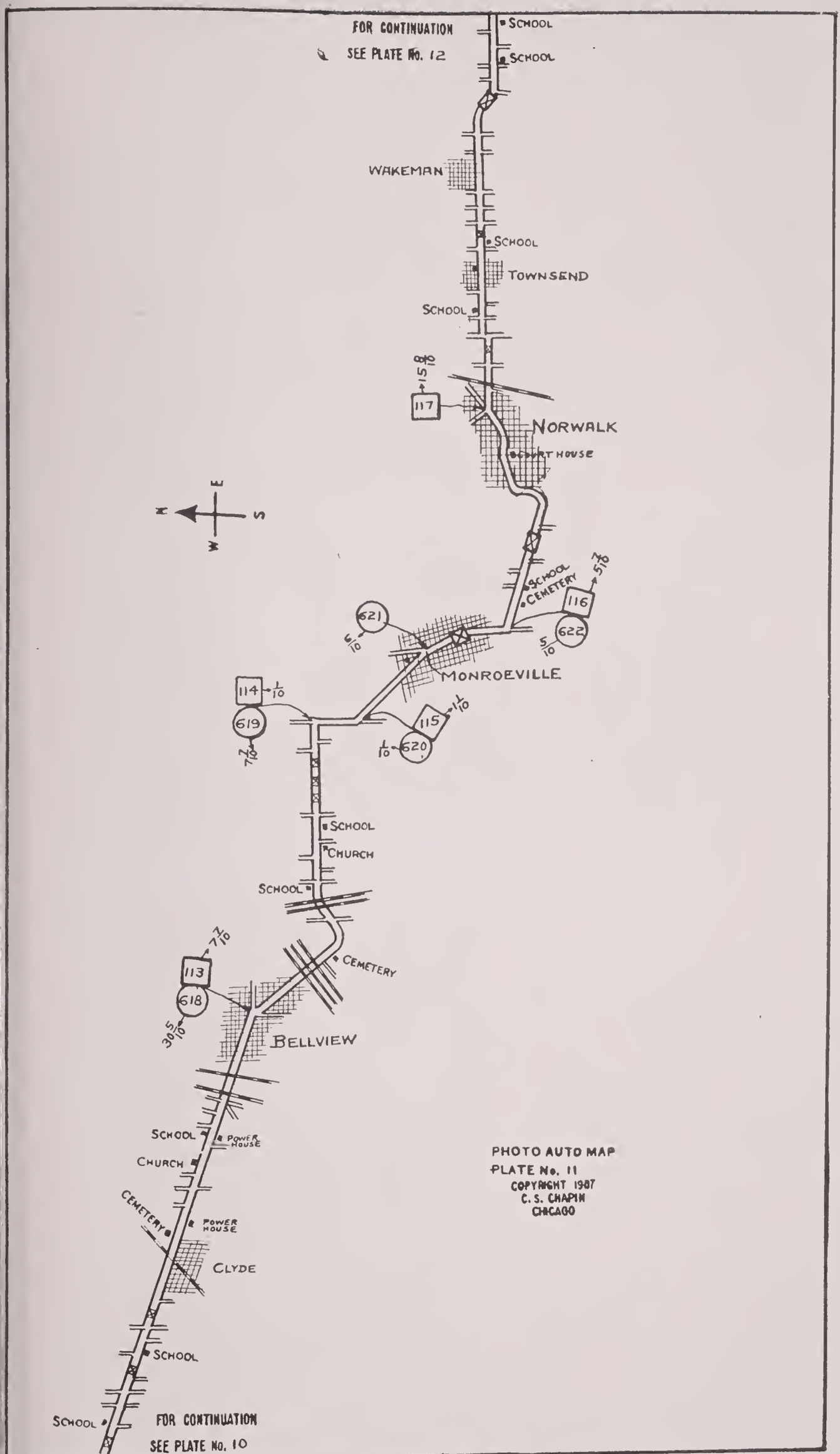
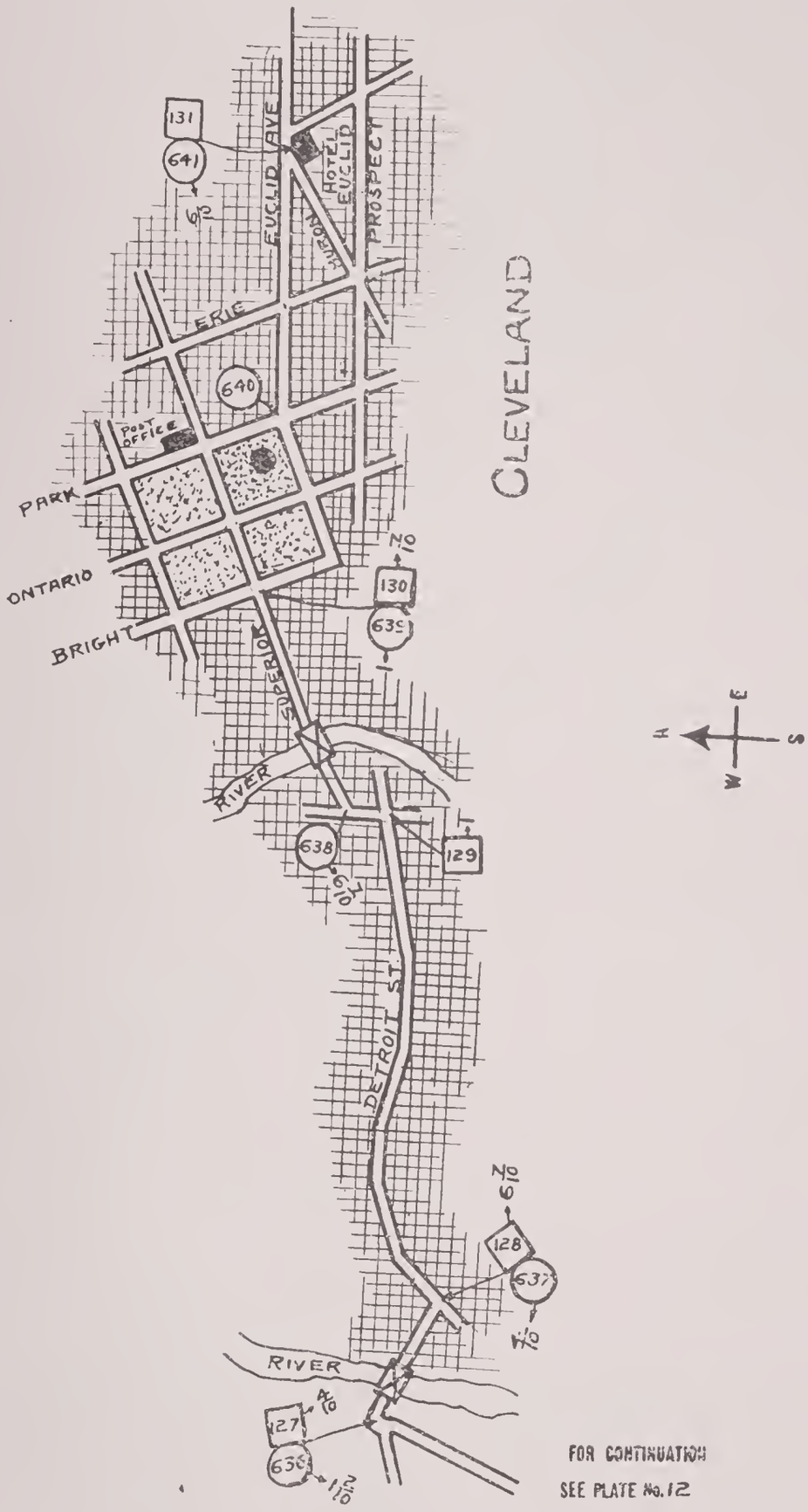

FOR CONTINUATION
SEE PLATE No. 12
SCHOOL
SCHOOL
WAKEMAN
SCHOOL
TOWNSEND
SCHOOL
117
NORWALK
COURT HOUSE
N
E
S
W
SCHOOL
CEMETERY
116
622
621
MONROEVILLE
114
619
115
620
SCHOOL
CHURCH
SCHOOL
CEMETERY
113
618
BELLVIEW
SCHOOL
POWER HOUSE
CHURCH
CEMETERY
POWER HOUSE
CLYDE
SCHOOL
SCHOOL
FOR CONTINUATION
SEE PLATE No. 10
PHOTO AUTO MAP
PLATE No. 11
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO

PHOTO AUTO MAP
PLATE No. 12
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO




FOR CONTINUATION
SEE PLATE No. 12

PHOTO AUTO MAP
PLATE No. 13
COPYRIGHT 1907
G. S. CHAPIN
CHICAGO

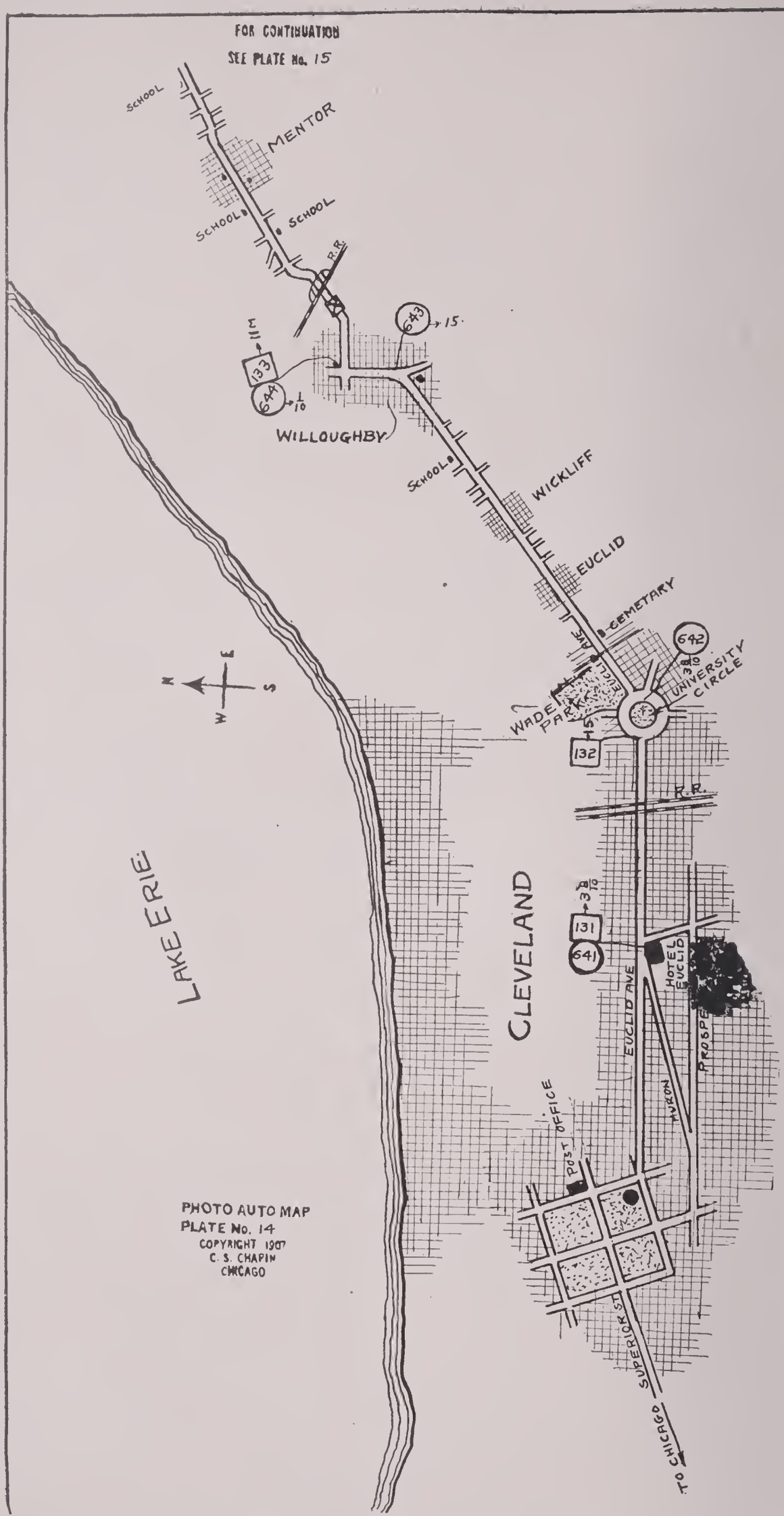
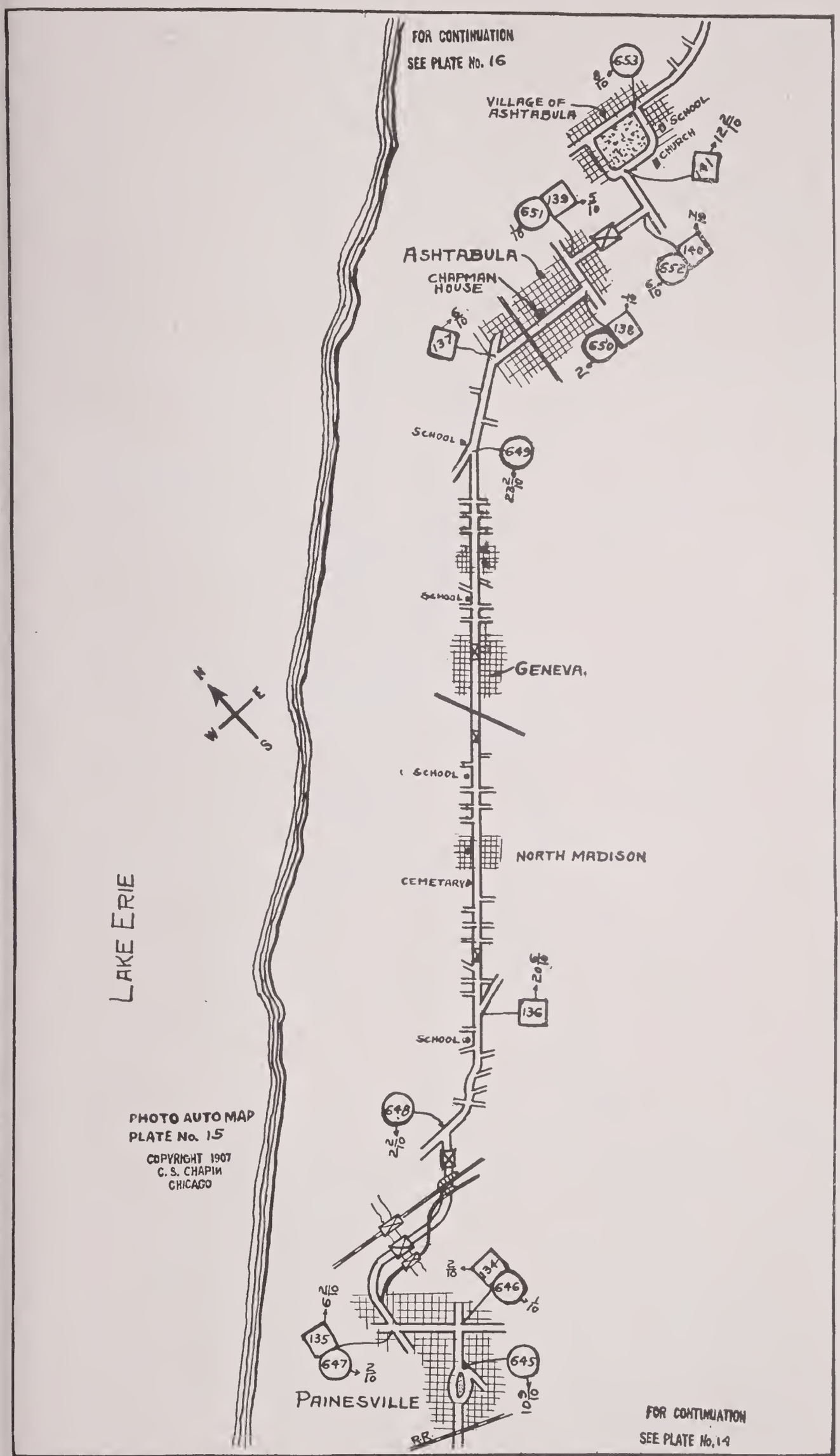
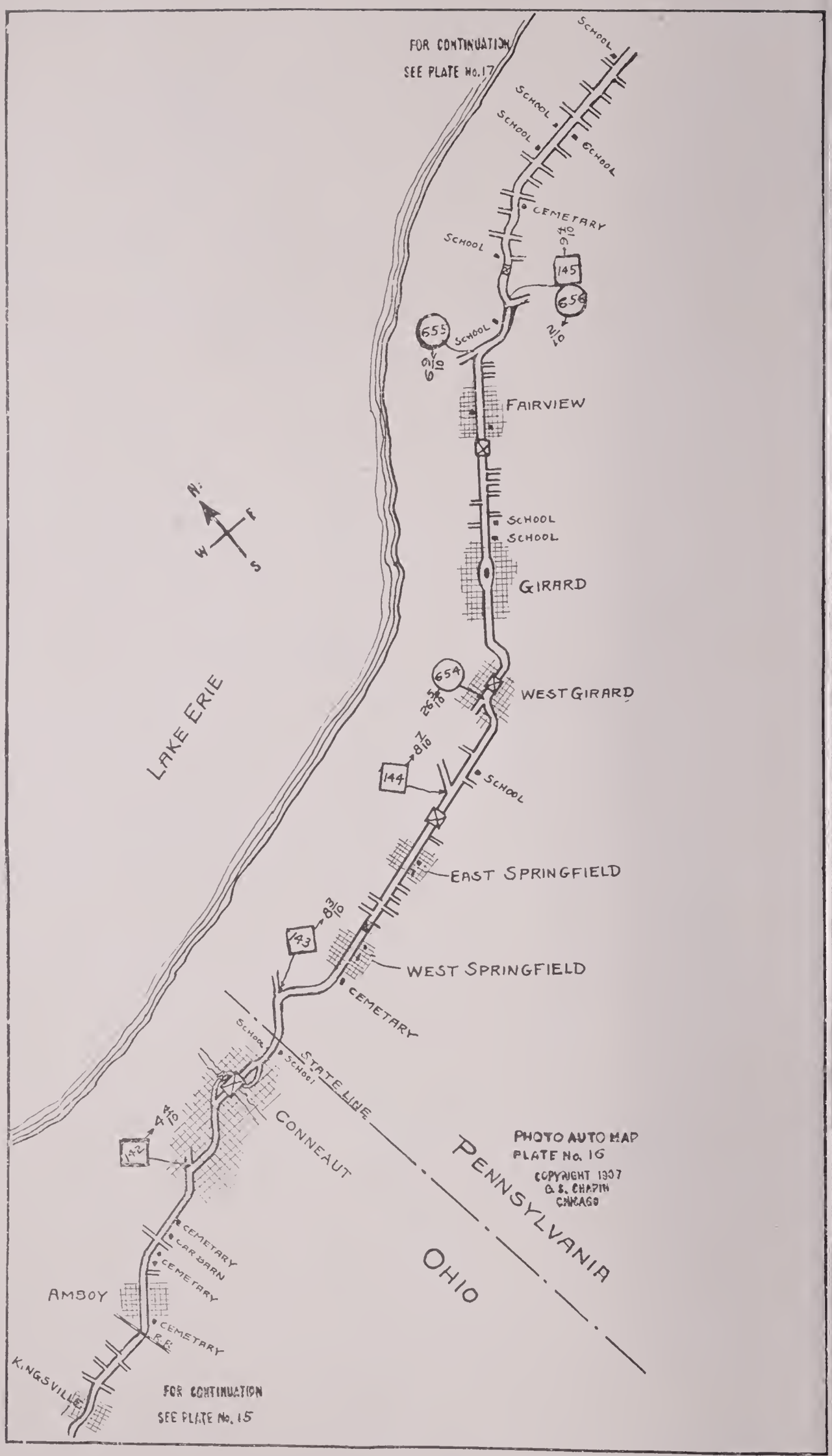



PHOTO AUTO MAP
PLATE No. 14
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO


FOR CONTINUATION
SEE PLATE No. 16
653
VILLAGE OF ASHTABULA
SCHOOL
CHURCH
141
139
651
140
552
ASHTABULA
CHAPMAN HOUSE
138
650
131
SCHOOL
649
SCHOOL
GENEVA.
SCHOOL
NORTH MADISON
CEMETARY
136
SCHOOL
648
134
646
135
647
645
PAINESVILLE
R.R.
LAKE ERIE
N
E
S
W
PHOTO AUTO MAP
PLATE No. 15
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO
FOR CONTINUATION
SEE PLATE No. 14


FOR CONTINUATION
SEE PLATE No. 17
SCHOOL
SCHOOL
SCHOOL
SCHOOL
CEMETARY
SCHOOL
145
656
655
SCHOOL
FAIRVIEW
SCHOOL
SCHOOL
GIRARD
N.
E.
W.
S.
LAKE ERIE
654
WEST GIRARD
144
SCHOOL
EAST SPRINGFIELD
143
WEST SPRINGFIELD
CEMETARY
SCHOOL
SCHOOL
STATE LINE
CONNEAUT
142
PENNSYLVANIA
OHIO
PHOTO AUTO MAP
PLATE No. 16
COPYRIGHT 1907
G. S. CHAPIN
CHICAGO
CEMETARY
CAR BARN
CEMETARY
AMBOY
CEMETARY
R.R.
KINGSVILLE
FOR CONTINUATION
SEE PLATE No. 15

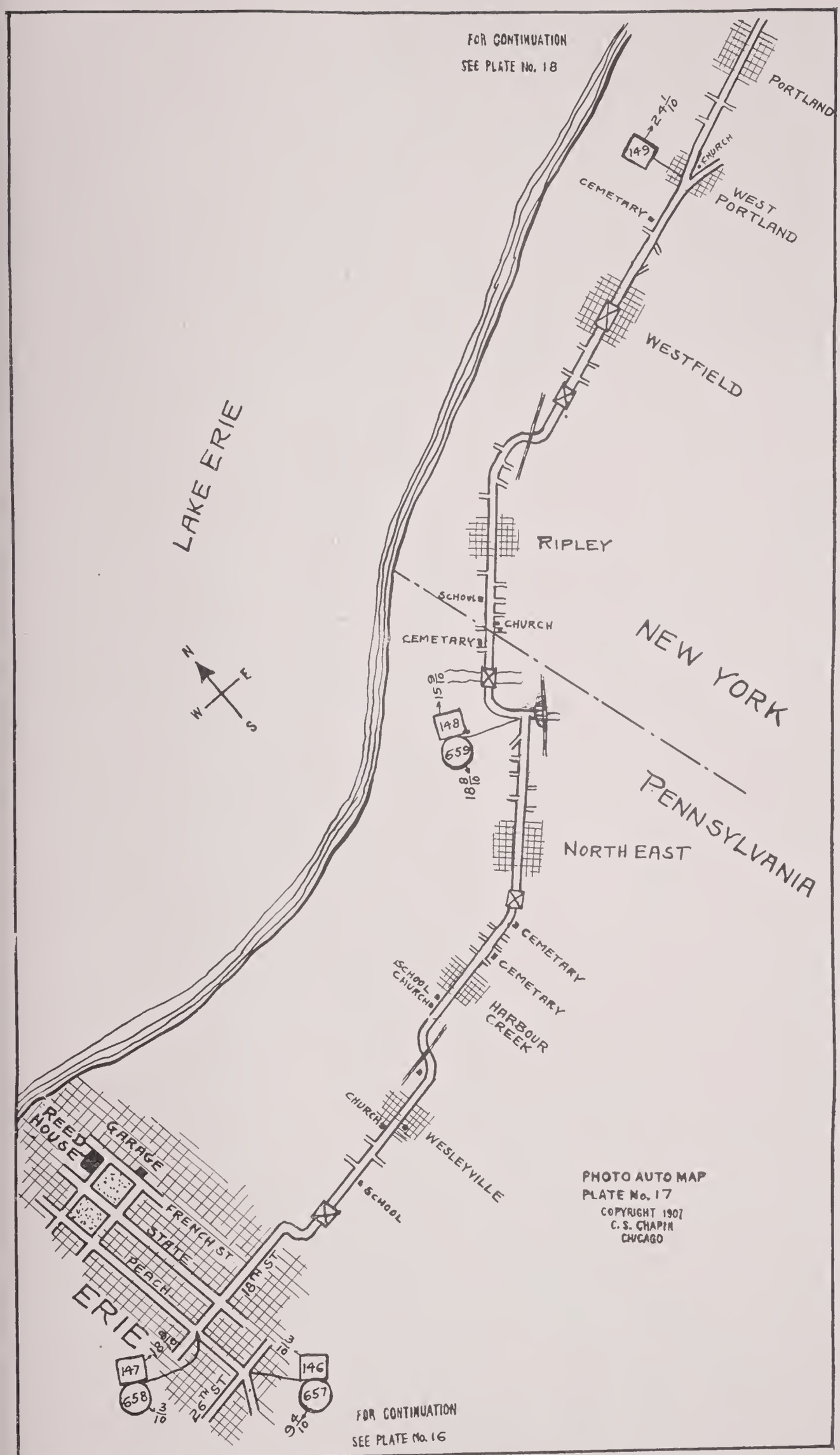
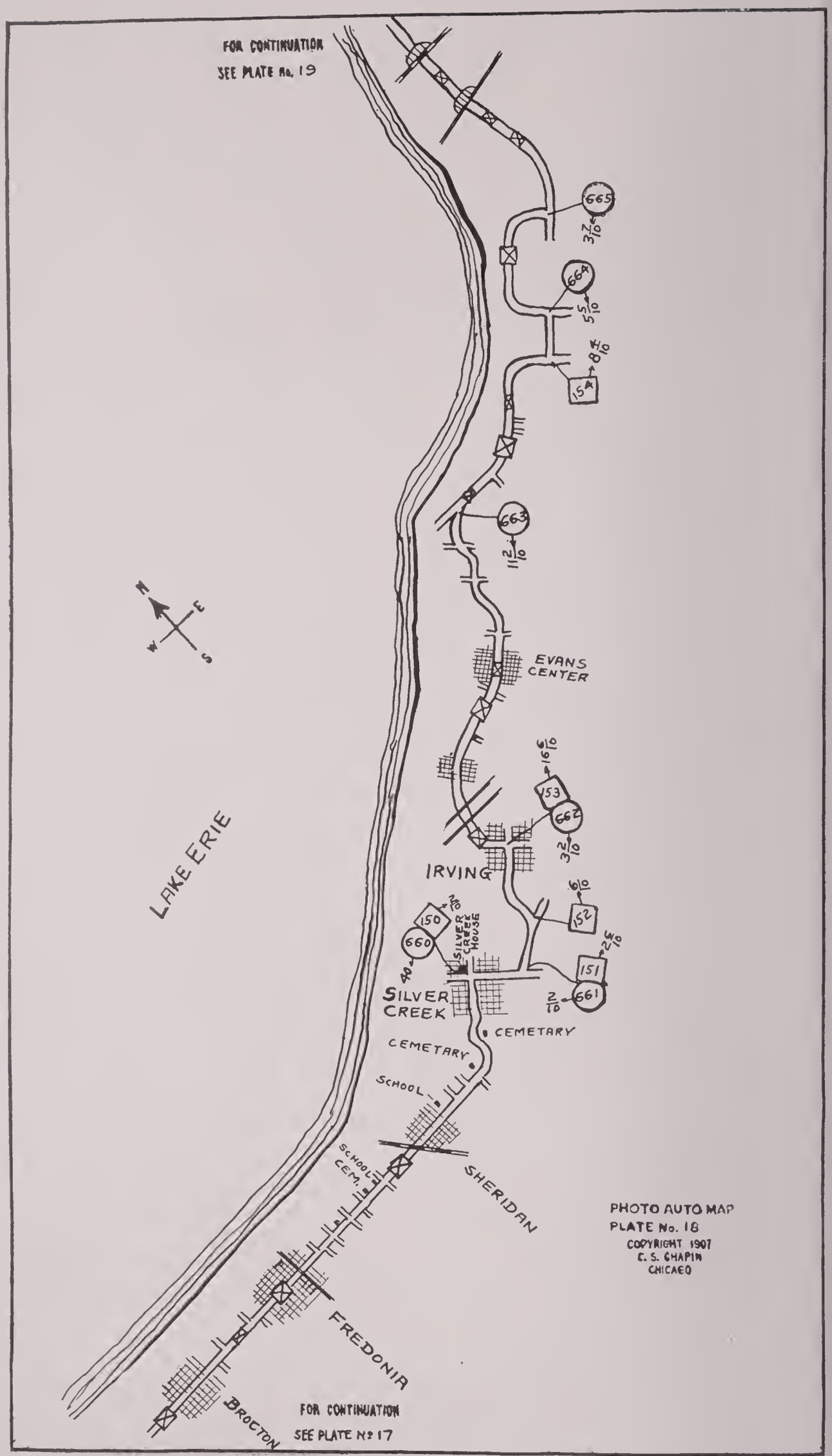



PHOTO AUTO MAP
PLATE No. 17
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO


FOR CONTINUATION
SEE PLATE No. 19
665
3 7/10
664
5 5/10
8 4/10
154
663
11 2/10
N
E
W
S
EVANS CENTER
16 6/10
153
662
3 2/10
IRVING
6/10
152
LAKE ERIE
150
20/10
SILVER CREEK HOUSE
660
40
151
2 5/10
661
2/10
SILVER CREEK
CEMETARY
CEMETARY
SCHOOL
SCHOOL CEM.
SHERIDAN
FREDONIA
BROCTON
FOR CONTINUATION
SEE PLATE No 17
PHOTO AUTO MAP
PLATE No. 18
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO

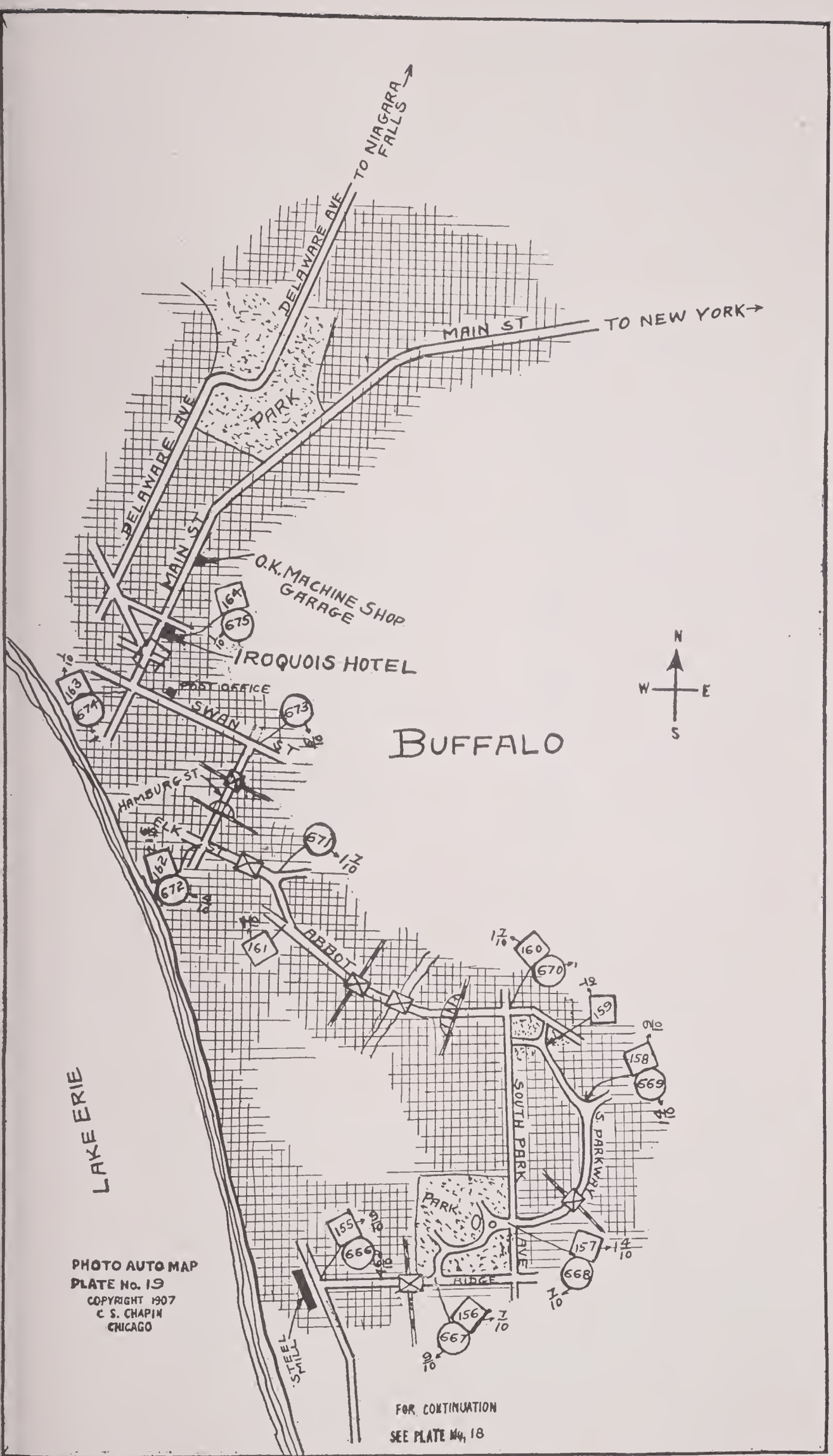
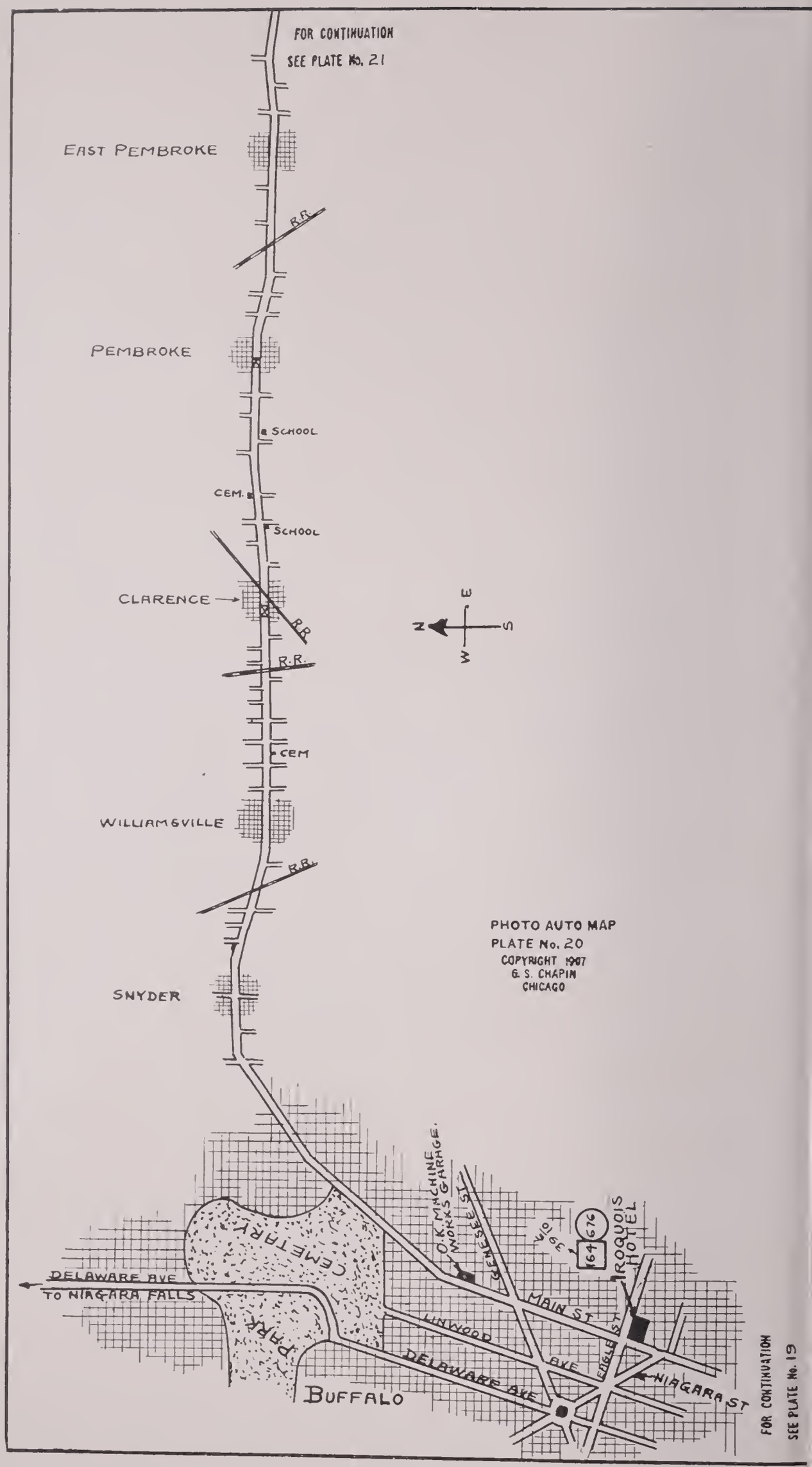



PHOTO AUTO MAP
PLATE No. 19
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO


FOR CONTINUATION
SEE PLATE No. 21
EAST PEMBROKE
R.R.
PEMBROKE
SCHOOL
CEM.
SCHOOL
CLARENCE
R.R.
R.R.
CEM
WILLIAMSVILLE
R.R.
SNYDER
N
E
S
W
PHOTO AUTO MAP
PLATE No. 20
COPYRIGHT 1907
G. S. CHAPIN
CHICAGO
O.K. MACHINE WORKS GARAGE.
GENESEE ST
CEMETERY
PARK
DELAWARE AVE
TO NIAGARA FALLS
LINWOOD AVE
DELAWARE AVE
BUFFALO
MAIN ST
EAGLE ST
IROQUOIS HOTEL
NIAGARA ST
FOR CONTINUATION
SEE PLATE No. 19

FOR CONTINUATION
SEE PLATE No. 22
NORTH CHILI
CHURCHVILLE
BERGEN
BYRON
SCHOOL
SCHOOL
CEM
BATAVIA
GARAGE
HOTEL RICHMOND
FOR CONTINUATION
SEE PLATE No 20
N
S
E
W
PHOTO AUTO MAP
PLATE No 21
COPYRIGHT 1907
G S CHAPIN
CHICAGO

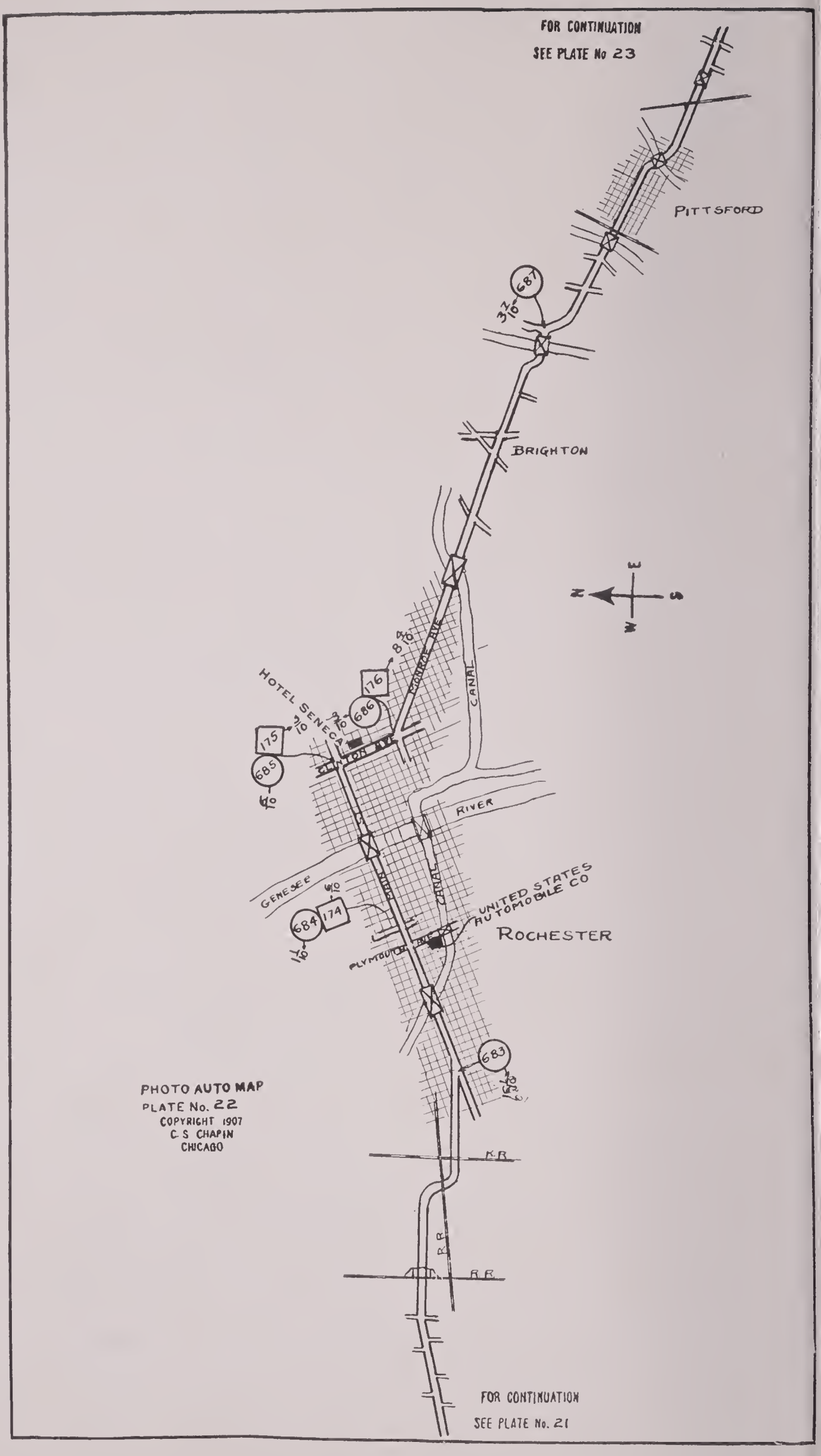



PHOTO AUTO MAP
PLATE No. 22
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO

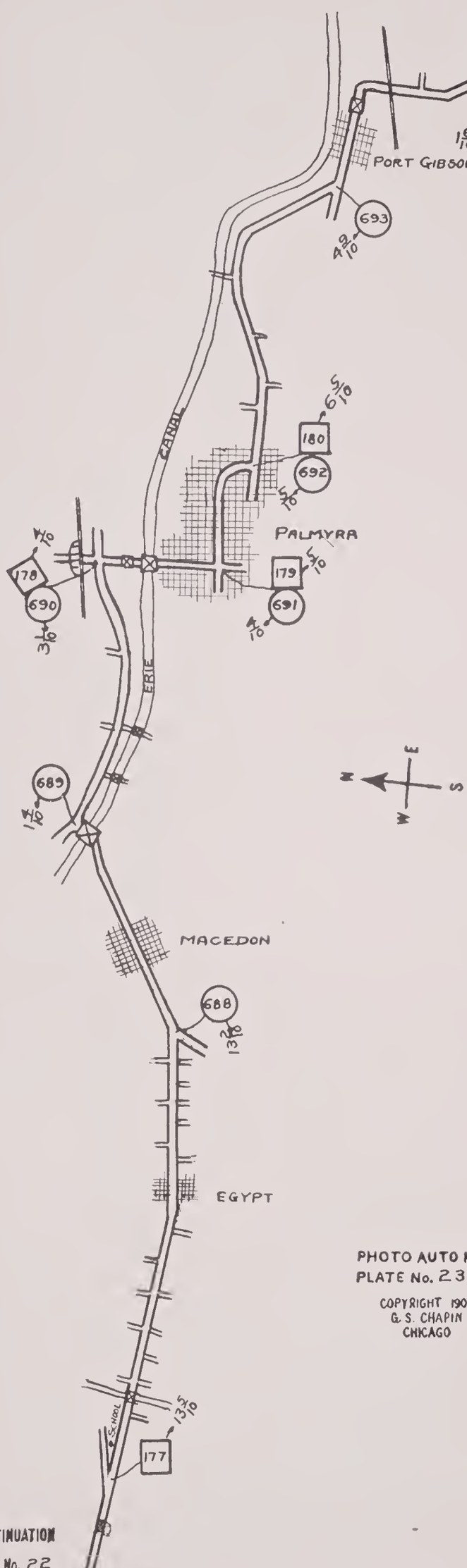
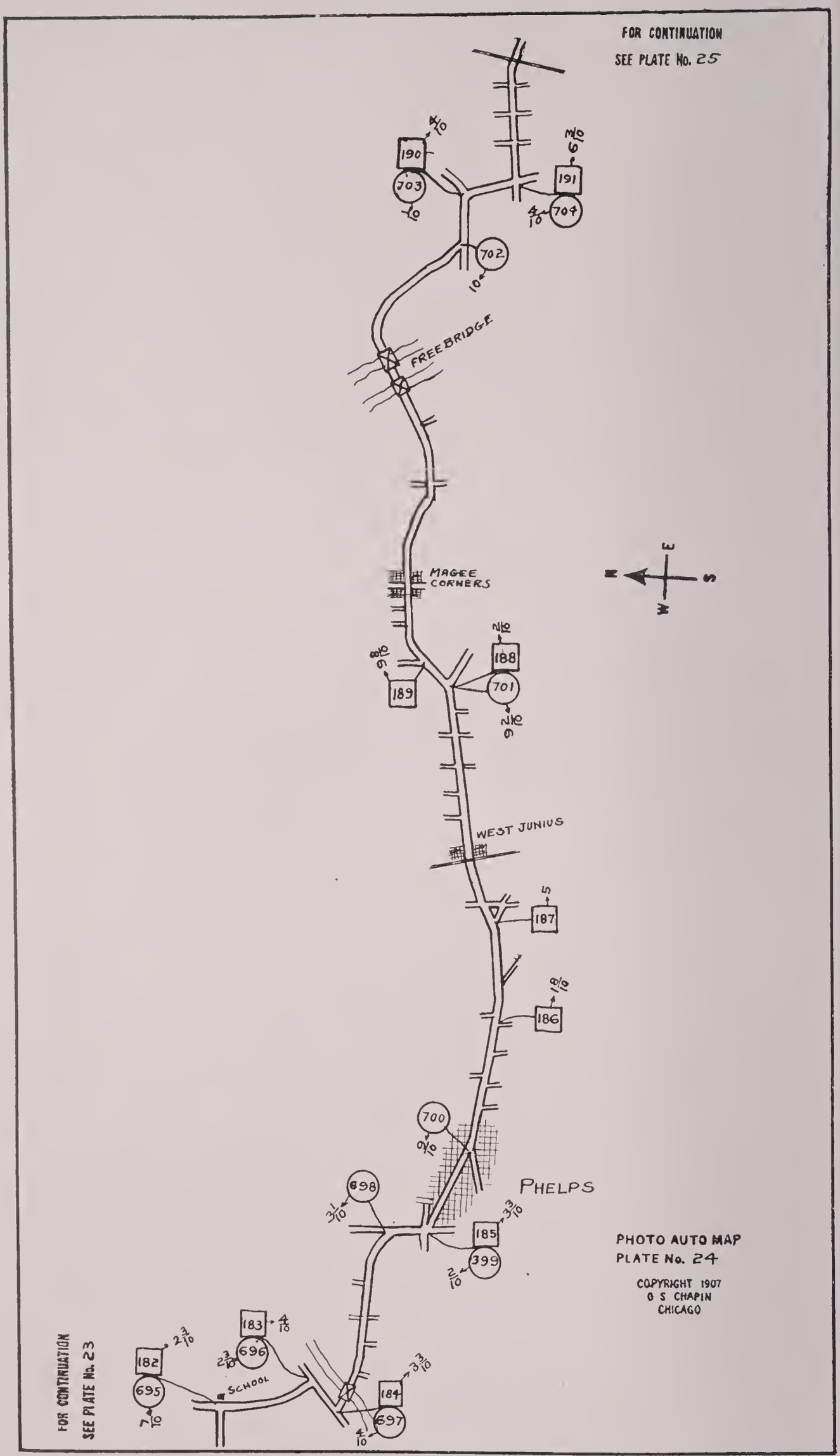



PHOTO AUTO MAP
PLATE No. 23

COPYRIGHT 1907
G. S. CHAPIN
CHICAGO


FOR CONTINUATION
SEE PLATE No. 25
190
4/10
703
1/10
191
6 3/10
704
4/10
702
1/10
FREE BRIDGE
MAGEE CORNERS
N
E
S
W
188
2/10
701
2/10
189
9 8/10
WEST JUNIUS
187
5
186
1 8/10
700
9/10
PHELPS
698
3 1/10
185
3 3/10
399
2/10
183
4/10
696
2 3/10
182
2 3/10
695
7/10
SCHOOL
184
3 3/10
697
4/10
FOR CONTINUATION
SEE PLATE No. 23
PHOTO AUTO MAP
PLATE No. 24
COPYRIGHT 1907
O S CHAPIN
CHICAGO

FOR CONTINUATION
SEE PLATE No. 26

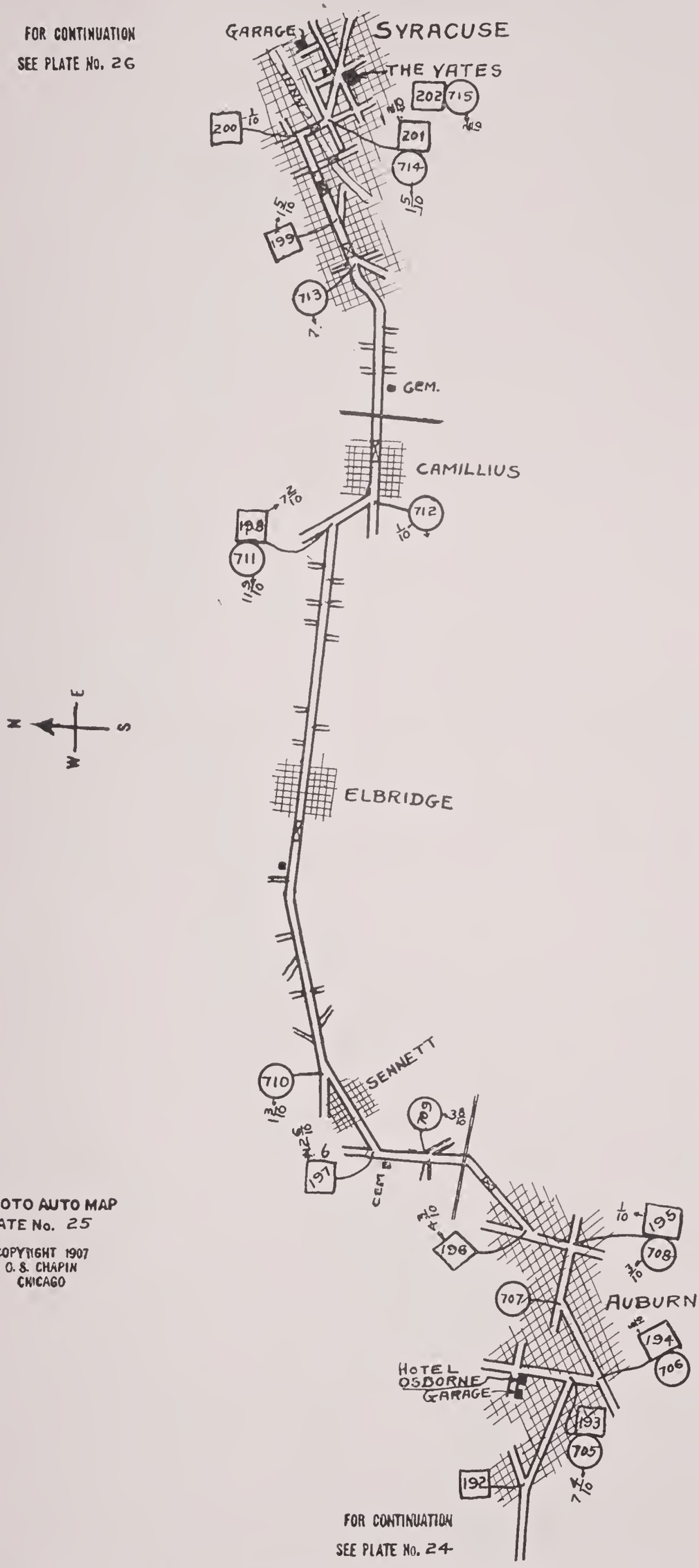
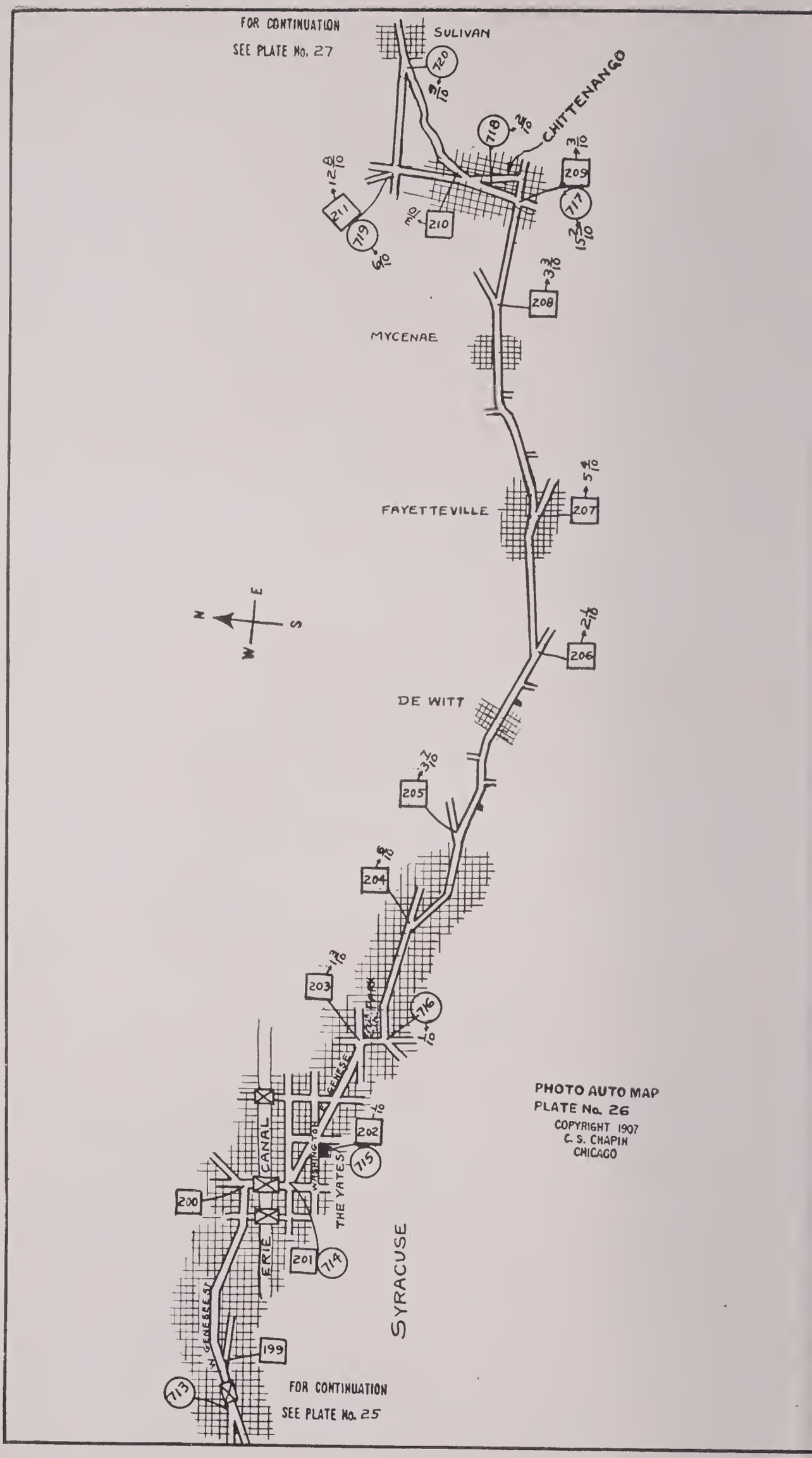



PHOTO AUTO MAP
PLATE No. 25

COPYRIGHT 1907
O. S. CHAPIN
CHICAGO

FOR CONTINUATION
SEE PLATE No. 24


FOR CONTINUATION
SEE PLATE No. 27
SULIVAN
CHITTENANGO
MYCENAE
FAYETTEVILLE
DE WITT
SYRACUSE
CANAL
ERIE
THE YATES
N. GENESEE ST.
FOR CONTINUATION
SEE PLATE No. 25
N
S
E
W
PHOTO AUTO MAP
PLATE No. 26
COPYRIGHT 1907
C. S. CHAPIN
CHICAGO

# PHOTO-AUTO MAPS

## Buffalo and Rochester to Chicago

No. 684

# SENECA HOTEL, ROCHESTER, N. Y.

A. M. WOOLLEY, Manager

Rochester's New Fireproof Hotel, Clinton Avenue South. 350 rooms, 300 with tub or shower bath. European plan, $1.50 per day and upward. Write for illustrated booklet. Next photo for Buffalo (photo No. 683) at Clinton Avenue, six-tenths of a mile.

Memo.....

.....

.....

## UNITED STATES AUTOMOBILE CO.

21 TO 29 PLYMOUTH AVENUE

Turn LEFT into Plymouth Avenue, one block beyond Powe Hotel. Garage on right, one half-block. This is the be garage in Rochester. Supplies, repairing and chargin Agents for the Stearns, Stevens-Duryea, Locomobile ar Pierce Arrow. Ask for a tour book for trips arour Rochester.

Memo .....

No. 683

Take RIGHT street at fork. Follow car tracks. North Chili nine miles. Churchville thirteen and three-tenths miles. Next photo sixteen and one-tenth miles.

Memo .....

.....

.....

.....

No. 682

Turn RIGHT entering Bergen. Next photo one and eight-tenths miles.

No. 681

Turn RIGHT at end of road. Byron five and three-tenth miles. Next photo six and two-tenths miles.

Memo .....

.....

.....

.....

.....

No. 680

Turn LEFT and North. Next photo four and nine-tenths miles.

No. 679

Turn RIGHT just after passing schoolhouse. Next photo at end of road, four-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 678

Turn LEFT at end of road. Next photo eight-tenths of a mile.

No. 677

Turn RIGHT at cross-roads; roadhouse on left before turning. Hotel Richmond, in Batavia, two and nine-tenths miles. This is the best hotel between Rochester and Buffalo, everything first-class. Hilts & Kennedy's new garage on Main Street, opposite Hotel Richmond. Supplies and repairing—the best of everything. East Pembroke seven miles. Pembroke thirteen and six-tenths miles. Clarence twenty-one and five-tenths miles. Williamsville twenty-nine and seven-tenths miles. Next photo in Buffalo, thirty-nine and six-tenths miles.

Memo .....

## HOTEL RICHMOND, BATAVIA, N. Y.

The best hotel between Buffalo and Rochester. Special attention given to tourists. Hilts & Kennedy's new garage on opposite side of Main Street. Storage, supplies and repairs.

Memo .....

No. 675

## THE IROQUOIS HOTEL, BUFFALO, N. Y.

STARTING POINT for run from Buffalo to Cleveland. This is the best hotel in Buffalo for the accommodation of tourists. European plan, with Cafe, Restaurant and Grill Room in connection. Leave the Iroquois Hotel on the LEFT. Next turn two blocks.

Memo.....

# STANDARD GARAGE CO.

1114-1116 MAIN STREET, BUFFALO, N. Y.

eave the Iroquois Hotel and go NORTH over Main St. about one mile finding garage on left hand side of street number 1114-1116 Main St. The largest garage in Buffalo, open day and night for supplies and repairs. Absolutely fireproof. Special attention given to tourists.

Memo.....

No. 674

Turn LEFT from Main Street into Swan Street. Next photo one mile.

Memo .....

.....

.....

.....

No. 673

Turn RIGHT from Swan Street into Hamburg Street. Hamburg Street is two blocks before Swan Street runs under railroad. Next turn six-tenths of a mile.

No. 672

Turn LEFT from Hamburg Street into Elk Street. Next photo at end of viaduct, four-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 671

Take RIGHT fork at end of viaduct. Next photo at small park, one and seven-tenths miles.

No. 670

Turn RIGHT at park from Abbot Road into South Park Avenue. Then turn left into park at first driveway. Next photo one mile.

Memo .....

.....

.....

.....

No. 669

Take RIGHT drive at fork. Next photo entering park, one and four-tenths miles.

No. 668

Turn LEFT at greenhouse. Keep to left until to end of park. Next photo leaving park, seven-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 667

Turn RIGHT and cross bridge. Next photo at end of street, nine-tenths of a mile.

No. 666

Turn LEFT at end of street. Steel mill on right after turning. Next photo four and six-tenths miles.

Memo .....

No. 665

Turn RIGHT. Hospital on right. Next photo three and seven-tenths miles.

No. 664

Turn RIGHT and follow wires. Go one-tenth of a mile to end of road and turn right. Next photo five and five-tenths miles.

Memo .....

.....

.....

.....

No. 663

Turn LEFT. Follow the wires. Next photo in Irving, eleven and two-tenths miles.

## No. 662

### IRVING

Turn RIGHT one block after crossing bridge. Next photo entering Silver Creek, three and two-tenths miles.

Memo .....

.....

.....

## No. 661

### SILVER CREEK

Turn RIGHT at end of road entering Silver Creek. Next photo at Silver Creek House, two-tenths of a mile.

No. 660

Turn LEFT at square. Silver Creek House on right of turn. Good accommodations for tourists. Sheridan six and two-tenths miles. Fredonia twelve and one-tenth miles. Brocton nineteen miles. Portland twenty and six-tenths miles. Westfield twenty-seven and eight-tenths miles. Ripley thirty-four and eight-tenths miles. Next photo forty miles.

Memo .....

No. 659

Turn RIGHT at top of steep hill just before reaching railroad embankment. North East three and seven-tenths miles. Harbour Creek ten and nine-tenths miles. Wesleyville fourteen and seven-tenths miles. Next photo in Erie, eighteen and eight-tenths miles.

No. 658

ERIE

Turn LEFT from Eighteenth Street into Peach Street. Nex photo for Cleveland, three-tenths of a mile. To go int main part of Erie, turn right into State Street, one bloc before this turn. Go up State Street through small par and turn right into North Park Road. Reed House on half-block. H. T. Raser Garage one half-block to right o French Street, after passing Reed House.

Memo

## THE REED HOUSE, ERIE, PA.

This is the best hotel in Erie. Centrally located in the heart of the business and shopping district. Special attention given to tourists.

## H. T. RASER GARAGE

This is the best garage in Erie. Located on French Street, half a block from the Reed House. Repairs and supplies of all kinds.

No. 657

Turn RIGHT from Peach Street into Twenty-sixth Street
Next photo at top of steep hill, nine and four-tenths miles

Memo .....

.....

.....

.....

.....

No. 656

Turn RIGHT at top of steep hill. Next photo two-tenths of
of a mile.

No. 655

Turn LEFT. Follow wires. Fairview two miles. Girard six and three-tenths miles. Next photo in West Girard, six and nine-tenths miles.

Memo .....

No. 654

Turn LEFT after crossing small bridge in West Girard. East Springfield four and nine-tenths miles. West Springfield nine and three-tenths miles. Conneaut thirteen and five-tenths miles. Amboy seventeen and two-tenths miles. Kingsville twenty-one and six-tenths miles. Next photo in village of Ashtabula, twenty-six and five-tenths miles.

No. 653

Turn LEFT at square in village of Ashtabula. Follow road around two sides of square and turn left into road with car tracks. Next photo eight-tenths of a mile.

Memo .....

.....

.....

.....

No. 652

Turn RIGHT with car tracks. Next photo at end of street in Ashtabula, six-tenths of a mile.

No. 651

ASHTABULA

Turn LEFT at end of street. Next photo one block.

Memo .....

.....

.....

.....

No. 650

Turn RIGHT from Main Street. Chapman House two blocks on right-hand side of street. Best accommodations in Ashtabula. Next photo two miles.

No. 649

STRAIGHT AHEAD on left road. Geneva seven and nine-tenths miles. North Madison thirteen and three-tenths miles. Next photo twenty-three and two-tenths miles.

Memo .....

.....

.....

.....

No. 648

Turn LEFT. Go down hill and cross bridge. Next photo in Painesville, two and two-tenths miles.

No. 647

PAINESVILLE

Turn LEFT with car tracks. Next photo two-tenths of a mile.

Memo .....

.....

.....

.....

No. 646

Turn RIGHT into Main Street. Next photo at park, one-tenth of a mile.

No. 645

Take RIGHT street at park and follow car tracks. Mento six and two-tenths miles. Next turn in Willoughby, te and nine-tenths miles.

Memo .....

.....

.....

.....

No. 644

WILLOUGHBY

Turn LEFT into Main Street. Next photo at monument, one-tenth of a mile.

No. 643

Take RIGHT street at monument. Wickliff five miles. Euclid eight and seven-tenths miles. Next photo in Cleveland, fifteen miles

Memo .....

.....

No. 642

CLEVELAND

From University Circle follow car line on down Euclid Avenue about four miles to Colonial Hotel, situated on Prospect Avenue. (Huron Road from Euclid Avenue into Prospect Avenue.)

No. 641

# COLONIAL HOTEL, CLEVELAND, OHIO

STARTING POINT for run from Cleveland to Toledo. The Colonial Hotel is a strictly first class, quiet, modern, fireproof Hotel. American and European plans with splendid restaurants. From Hotel go WEST to Ontario Street, then turn RIGHT to Public Square and next plate.

Memo .....

No. 640

Take LEFT hand street at Square. Follow street around two sides of square to next photo.

Memo .....

.....

.....

.....

No. 639

Turn LEFT from Bright Street into Superior Street. Next photo at end of street, one mile.

No. 638

Make "S" turn from Superior Street into Detroit Street. Next photo six and seven-tenths miles.

Memo .....

.....

.....

.....

No. 637

Turn RIGHT and follow pavement. Next photo after crossing bridge, four-tenths of a mile.

No. 636

Turn LEFT at end of bridge. Next photo at end of pavement, one and two-tenths miles.

Memo .....

.....

.....

.....

No. 635

Turn RIGHT at end of brick pavement. Dover, four and seven-tenths miles. Ridgeville, eleven and eight-tenths miles. Next photo in Elyria, fifteen and seven-tenths miles.

No. 634

Turn LEFT and follow car tracks. Next photo nine-tenths o
a mile.

Memo .....

.....

.....

.....

No. 633

ELYRIA

Turn LEFT from Broad Street into Middle Street. Park o
right after turning. Next photo one and two-tenths mile

No. 632

'urn RIGHT and South-West. Follow car tracks. Next photo eight-tenths of a mile.

Iemo .....

.....

.....

.....

.....

No. 631

Turn LEFT at fork. Next photo two-tenths of a mile.

No. 630

Turn RIGHT and West. Follow trolley line. Next ph
seven-tenths of a mile.

Memo .....

No. 629

Turn RIGHT and follow trolley line. Next photo thr
and six-tenths miles.

No. 628

Turn RIGHT and follow trolley line. Next photo one and one-tenth miles.

Memo .....

.....

.....

.....

.....

No. 627

Turn LEFT and follow trolley line. Next photo in Oberlin, one and four-tenths miles.

No. 626

OBERLIN

Turn RIGHT from College Street into Main Street. Park on left side after turning. Next photo two blocks.

Memo .....

.....

.....

.....

No. 625

Turn LEFT and West from Main Street into Lorain Street. Next photo four and five-tenths miles.

No. 624

Turn LEFT and South. Kipton, one and four-tenths miles. Next photo three and six-tenths miles.

Memo .....

.....

.....

No. 623

Turn RIGHT and West. Church on left after turning. Wakeman, five and six-tenths miles. Townsend, ten and one-tenth miles. Norwalk, sixteen and eight-tenths miles. Next photo at end of road, twenty-one and five-tenths miles.

No. 622

Turn RIGHT and North at end of road. Next photo in Monroeville, five-tenths of a mile.

Memo .....

.....

.....

.....

No. 621

MONROEVILLE

Take LEFT road at monument. Next photo at end of road, six-tenths of a mile.

No. 620

'urn RIGHT and North at end of road. Next photo one-tenth of a mile.

Iemo .....

.....

.....

.....

.....

No. 619

Turn LEFT and West. Follow wires. Next photo in Bellview, seven and seven-tenths miles.

No. 618

BELLVIEW

Turn LEFT into Main Street. Clyde, seven and six-tenth miles. Fremont, sixteen and six-tenths miles. Next phot in Woodville, thirty and five-tenths miles.

Memo .....

.....

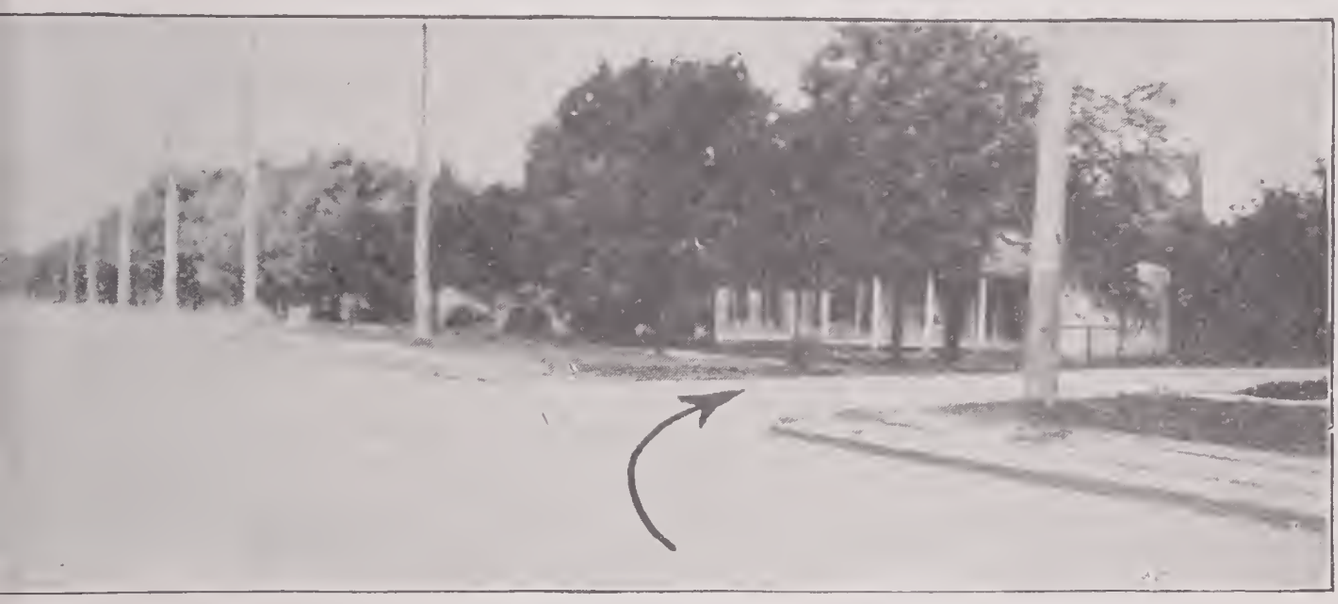
.....

No. 617

WOODVILLE

Keep to RIGHT and cross bridge. Next photo four-tenths of a mile.

No. 616



Turn RIGHT from Main Street. Next photo two and five-tenths miles.

Memo .....

.....

.....

.....

No. 615

Turn slightly to LEFT and follow trolley line. Genoa two and four-tenths miles. Next photo three and two-tenths miles.

No. 614

Turn LEFT and follow trolley line. Next photo in East Toledo, eleven and one-tenth miles.

Memo .....

.....

.....

.....

No. 613

EAST TOLEDO

Turn RIGHT from Woodville Street into E. Broadway. Next photo seven-tenths of a mile.

No. 612

Turn LEFT from E. Broadway into Oswald Street. Next photo at end of street, five-tenths of a mile.

Memo .....

No. 611

Turn LEFT into Front Street at end of Oswald Street. Next photo two blocks.

No. 610

Turn RIGHT from Front Street into Main Street and cros
bridge. Next photo in Toledo, six-tenths of a mile.

Memo .....

No. 609

TOLEDO

Turn LEFT from Cherry Street into Summit Street. Next
photo just around corner.

No. 608

Take RIGHT street at fork, turning from Summit into St. Clair Street. The Tavern (photo No. 607), two and one-half blocks.

Memo .....

## ATWOOD GARAGE

2815 MONROE ST., TOLEDO, OHIO

This is the best garage in Toledo. Sundries, repairing and charging. Leave the Tavern on the LEFT and go two and one-half blocks to Monroe Street. Turn right into Monroe Street and go straight ahead to the garage. Agents for the Franklin, Elmore and Pope-Hartford.

No. 607

## THE TAVERN, TOLEDO, OHIO

STARTING POINT of run from Toledo to South Bend. Thi hotel is the best in Toledo for the accommodation of tourists European plan, with fine cafe and grill room in connection Leave the Tavern on the LEFT and go two and one-hal blocks to next photo.

Memo .....

.....

.....

No. 606

Turn RIGHT from St. Clair Street into Monroe Street. Atwood Automobile Co. Garage on left hand side of Monroe St., one and three-quarters miles. This is one of the best Garages in the West. Next photo three and eight-tenths miles.

Memo .....

.....

.....

No. 605

Turn LEFT and West. Follow wires. Next photo sixteen and five-tenths miles.

No. 604

Turn LEFT and South. Church on left, cemetery on right after turning. Next photo at end of road, one mile.

Memo .....

.....

.....

.....

.....

No. 603

Turn RIGHT and West at end of road. Follow wires. Next photo three-tenths of a mile.

No. 602

Turn LEFT and South. Next photo at end of road, two and eight-tenths miles.

Memo .....

.....

.....

.....

.....

No. 601

Turn LEFT and East at end of road. Follow wires. Next photo five-tenths of a mile.

No. 600

Turn RIGHT and South. Follow wires. Next photo leaving Swanton, two and nine-tenths miles.

Memo .....

No. 599

SWANTON

Turn RIGHT and West leaving Swanton. Delta six and four-tenths miles. Next photo nine and one-tenth miles.

No. 598

Turn LEFT and South. Next photo one mile.

Memo .....

No. 597

Turn RIGHT and West. School on right, church on left of turn. Next photo at end of road, one mile.

No. 596

Turn RIGHT at end of road. Cross railroad tracks, then turn left and continue West. Next photo three and six tenths miles.

Memo .....

.....

.....

.....

No. 595

Turn LEFT and South. Next photo at end of street in Wauseon, one mile.

No. 594

WAUSEON

Turn RIGHT and West at end of Main Street. Park on left after turning. Next photo one and two-tenths miles.

Memo .....

.....

.....

.....

No. 593

Turn RIGHT and cross tracks, then continue West. Next photo seven and eight-tenths miles.

No. 592

Turn LEFT and South. Red brick school on right. Follow wires. Next photo in Archbold, one and four-tenths miles

Memo .....

.....

.....

.....

No. 591

ARCHBOLD

Turn RIGHT and West from Main Street opposite Hotel Verniss. Next photo one mile.

No. 590

Turn LEFT and South. Leave wires. Next photo one and five-tenths miles.

Memo .....

.....

.....

.....

.....

No. 589

Turn RIGHT and West. School on left after turning. Next photo at end of road, nine-tenths of a mile.

No. 588

Turn LEFT at end of road and go fifty feet, then turn righ and continue West. Stryker three and eight-tenths miles Next photo eight and seven-tenths miles.

Memo .....

.....

.....

.....

No. 587

Turn LEFT and South. Next photo two and four-tenths miles.

No. 586

Turn RIGHT and West. Next photo in Bryan, eight-tenths of a mile.

Memo .....

.....

.....

.....

No. 585

BRYAN

Turn LEFT and South into Main Street. Hotel Christman, the best hotel in Bryan, one block. Next photo three blocks.

No. 584

Turn RIGHT and West from Main Street. Court House o
right. Next photo two blocks.

Memo .....

.....

.....

.....

.....

No. 583

Turn LEFT and South. Church on right after turning.
Next photo three-tenths of a mile.

No. 582

Turn RIGHT and South-West. Mill on left of turn. Next photo three and four-tenths miles.

Memo .....

No. 581

Turn RIGHT and West. School on left before turning. Next photo three and eight-tenths miles.

No. 580

Keep to RIGHT at fork. Pass school-house on left. Next photo at end of road, one and three-tenths miles.

Memo .....

.....

.....

.....

No. 579

Turn LEFT at end of road. Go one hundred and fifty feet, then turn right and continue West. Next photo at end of road in Edgerton, two and eight-tenths miles.

No. 578

EDGERTON

Turn LEFT at end of road. Go one hundred and fifty feet, then turn right and West. Next photo three-tenths of a mile.

Memo .....

.....

.....

No. 577

Turn RIGHT and cross railroad tracks; then turn left and continue West. Next photo three and six-tenths miles.

No. 576

Turn LEFT and South. Cross railroad tracks. Next photo five-tenths of a mile.

Memo .....

.....

.....

.....

No. 575

Turn RIGHT and West. Follow wires. Butler three and one-tenth miles. Next photo after crossing tracks, six and five-tenths miles.

No. 574

'urn RIGHT and West after crossing tracks. Next photo at end of road, one and seven-tenths miles.

Iemo .....

.....

.....

.....

No. 573

Turn LEFT at end of road. Go fifty feet, then turn right and continue West. Follow wires. Next photo, Waterloo, three and one-tenth miles.

No. 572

WATERLOO

Turn RIGHT and South entering Waterloo. Next phot
one mile.

Memo .....

.....

.....

.....

No. 571

Turn LEFT on first road after crossing bridge. Next phot
ten and six-tenths miles.

No. 570

Turn LEFT and West. Follow wires. Next photo in Kendallville, three and three-tenths miles.

Memo .....

.....

.....

.....

No. 569

KENDALLVILLE

Turn LEFT and South into East Street. Next photo two-tenths of a mile.

No. 568

Turn RIGHT from East Street into Mitchell Street. Follo
wires. Next photo six-tenths of a mile.

Memo .....

.....

.....

.....

.....

No. 567

Turn RIGHT and North from Mitchell Street into Mai
Street. Next photo at end of road six-tenths of a mile.

No. 566

Turn LEFT at end of road. Next photo one-tenth of a mile.

Memo .....

No. 565

Go STRAIGHT AHEAD and cross railroad tracks. Brimfield five and six-tenths miles. Next photo after crossing viaduct, five and nine-tenths miles.

No. 564

Turn LEFT and cross bridge; then turn right and continu
West. Next photo at end of road, four and one-tenth miles

Memo .....

.....

.....

.....

.....

No. 563

Turn RIGHT and North at end of road. Follow most wires.
Next photo in Wawaka, seven-tenths of a mile.

No. 562

WAWAKA

Turn LEFT and West. Red brick church on right. Follow wires. Next photo one and three-tenths miles.

Memo .....

.....

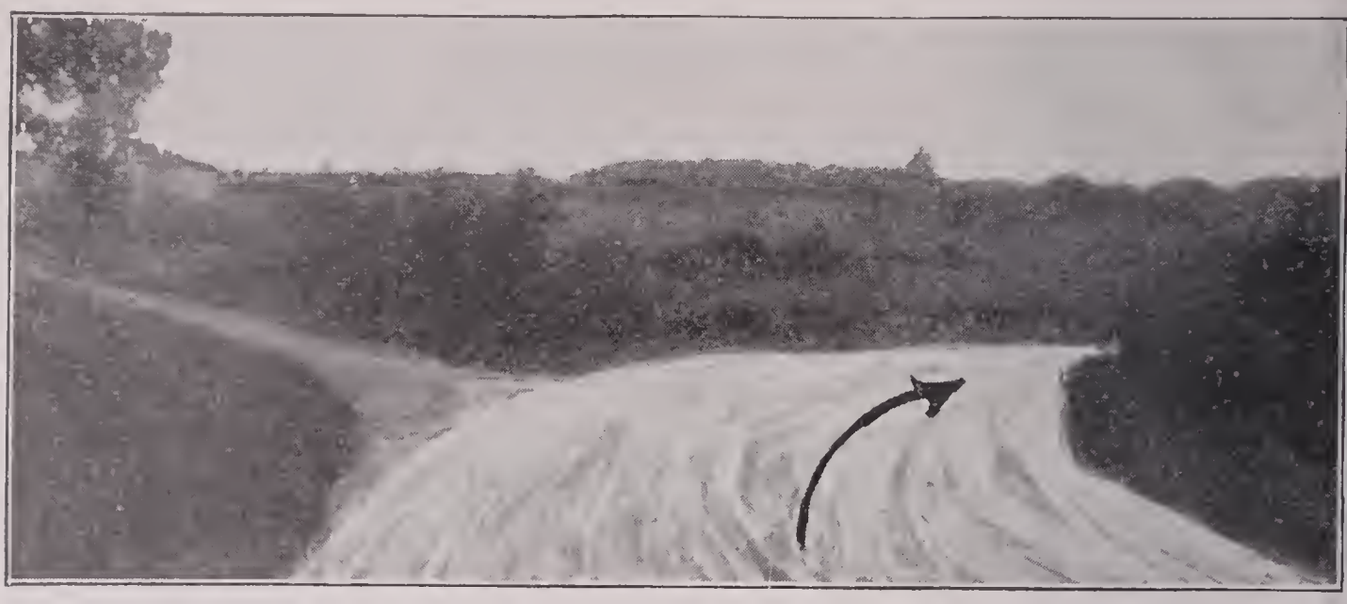
.....

.....

No. 561

Turn LEFT and West. Follow wires. Next photo eight-tenths of a mile.

No. 560



Turn RIGHT and West. School on left. Follow wires. Next photo at end of road, two and four-tenths miles.

Memo .....

.....

.....

.....

.....

No. 559

Turn RIGHT and North at end of road. Follow wires. Next photo two-tenths of a mile.

No. 558

Turn LEFT and West. Follow wires. Next photo Ligonier, one and two-tenths miles.

Memo .....

.....

.....

.....

.....

No. 557

LIGONIER

Turn RIGHT and North. Next photo four-tenths of a mile.

No. 556

Turn LEFT and West from Main Street. Next photo five and nine-tenths miles.

Memo .....

.....

.....

.....

.....

No. 555

Turn RIGHT and North. School house on right. Follow most wires. Next photo at end of road, six-tenths of a mile.

No. 554

Turn LEFT and West at end of road. Follow wires. Benton four and two-tenths miles. Next photo entering Goshen, ten and eight-tenths miles.

Memo .....

.....

.....

.....

No. 553

Turn LEFT and West. Next photo in Goshen, six-tenths of a mile.

No. 552

GOSHEN

Turn RIGHT and North into Main Street. Next photo five-tenths of a mile. Hotel Hascal, the best in Goshen, opposite square on left side of Main Street. Goshen Automobile Co. opposite Hotel Hascal.

Memo .....

.....

.....

No. 551

Turn LEFT from Main Street. Follow car tracks. Next photo after crossing bridge, four-tenths of a mile.

No. 550

Turn RIGHT into first street after crossing bridge. Next photo one mile.

Memo .....

.....

.....

.....

No. 549

Turn RIGHT and North. Next photo three and one-tenth miles.

No. 548

Turn LEFT and cross railroad tracks; then turn right and continue along tracks. Dunlap one mile. Next photo one and six-tenths miles.

Memo .....

.....

.....

.....

No. 547

Turn LEFT and West. Next photo Osceola, five and seven-tenths miles.

No. 546

OSCEOLA

Turn RIGHT; cross railroad tracks, then turn left and continue West. Mishawaka five and eight-tenths miles. Next photo South Bend, ten and one-tenth miles.

Memo .....

.....

.....

No. 545

Turn RIGHT from Washington Street into Main Street. Hotel Oliver (photo No. 544) at this corner.

No. 544

## HOTEL OLIVER, SOUTH BEND, IND.

This hotel is one of the best encountered between Chicago and New York. Every facility possible is provided for the comfort of its guests. Auto parties given special attention. Next photo (No. 543) two blocks.

Memo .....

## TWENTIETH CENTURY GARAGE

SOUTH BEND, IND.

Located one block WEST of Hotel Oliver and half a block South on Lafayette Street. This garage is equipped with a first-class machine shop, and special attention is given to tourists.

Memo .....

No. 543

Turn LEFT, West. Turn from Main Street into La Salle Street, two blocks from the Hotel Oliver. Next turn two-tenths of a mile.

Memo .....

.....

.....

No. 542

Turn RIGHT, West. Follow street car tracks to end of brick pavement. Next photo seventeen and one-tenth miles, after passing through New Carlisle, fourteen miles. Follow the wires.

No. 541

Turn LEFT, South-West. Cottage ahead on right at turn. Next turn two and nine-tenths miles. Road on right leads to Rolling Prairie.

Memo .....

No. 540

STRAIGHT AHEAD, South-West. White frame dwelling on left. Next photo seven and three-tenths miles.

## No. 539

Turn LEFT. Mill on left, go to end of street and turn to right, go two blocks. Next photo five-tenths of a mile.

Memo .....

.....

.....

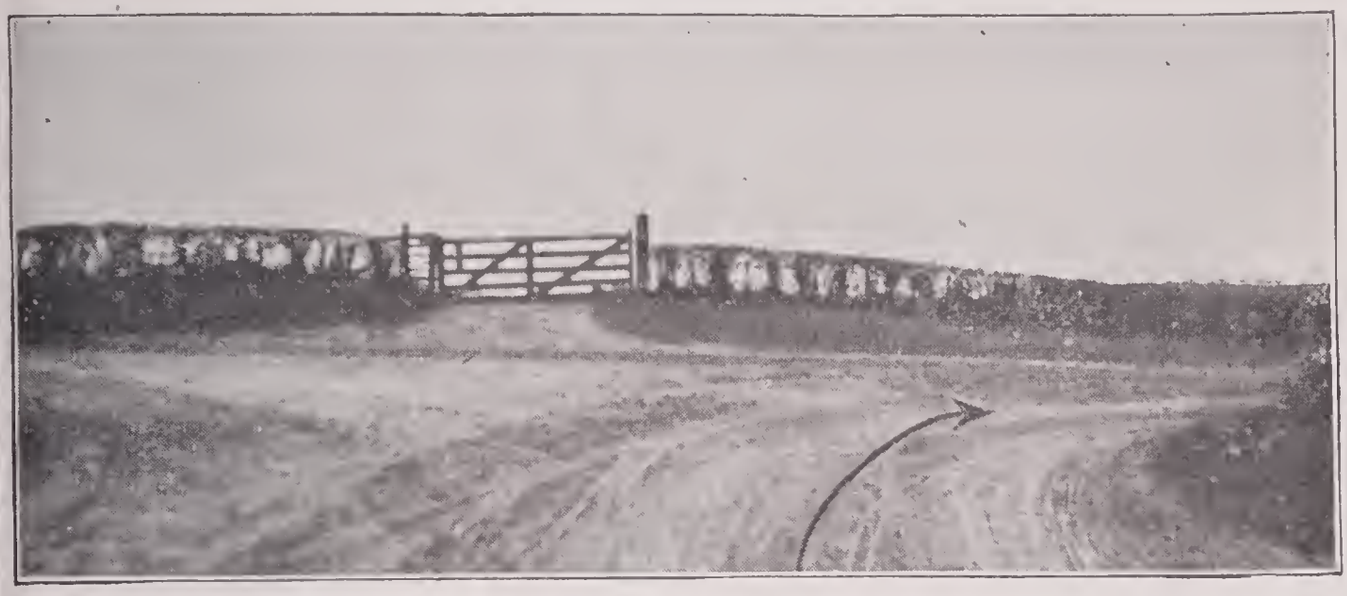
.....

.....

## No. 538

Turn LEFT, South. Large hole on right, small lake one block ahead on right. Next photo nine-tenths of a mile.

No. 537



Turn RIGHT, West. Next photo three-tenths of a mile.

Memo .....

No. 536

Turn LEFT. Next photo three-tenths of a mile.

No. 535

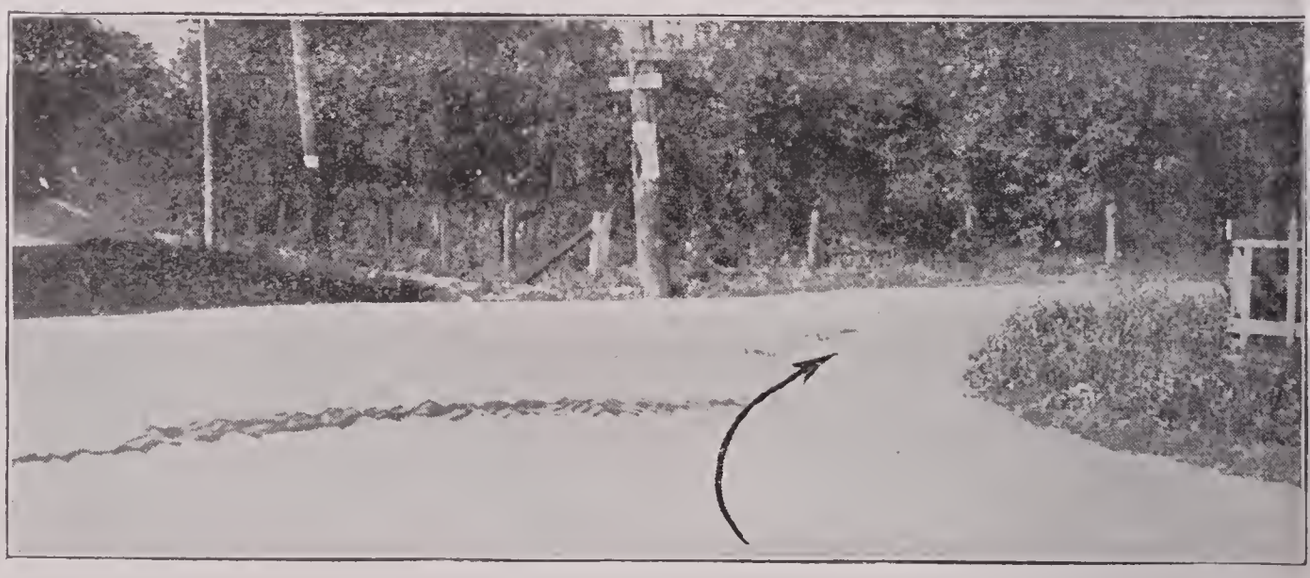
Turn RIGHT, West. Follow the wires. Next photo Wes
ville, nine miles.

Memo .....

.....

.....

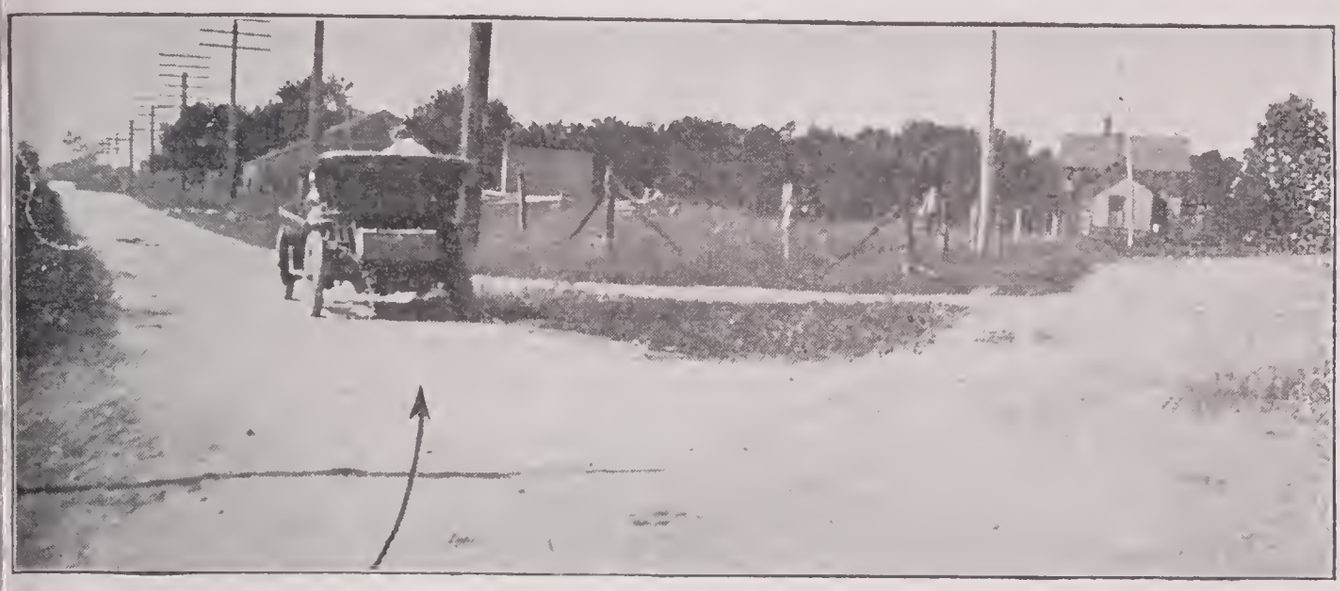
No. 534



WESTVILLE

Turn RIGHT, North. After going one hundred and fift
feet turn left on Main Street in Westville, keep straigh
ahead through town, passing under R. R. embankment
Next photo eight-tenths of a mile.

No. 533



Turn LEFT, West, after passing under R. R. embankment. Next photo two and three-tenths miles.

Memo .....

.....

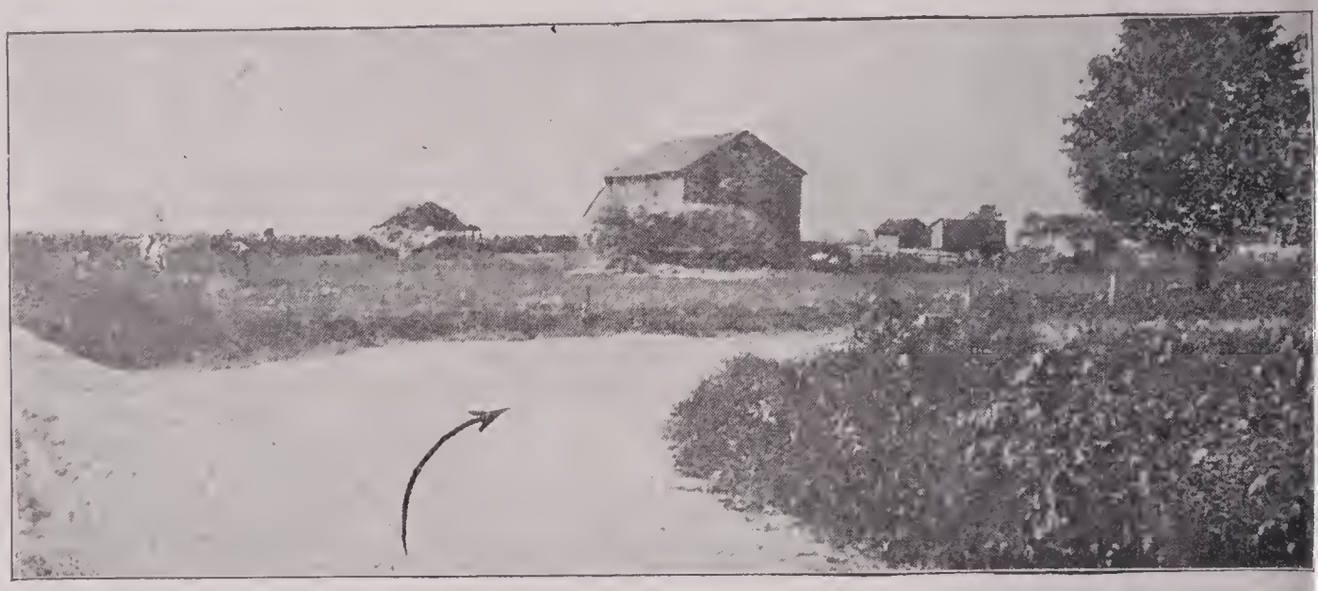
.....

.....

No. 532

STRAIGHT AHEAD. Next photo after arriving at end of road, turning to left and crossing small bridge, three and five-tenths miles.

No. 531



Turn RIGHT, South-West. After crossing small bridge re main on main road. Next turn at cross roads, one an three-tenths miles.

Memo .....

.....

.....

.....

No. 530

Turn RIGHT, West. Cross roads. Next turn Valparais two and six-tenths miles.

No. 529

## VALPARAISO

Turn RIGHT, North. Go one hundred and fifty feet, then left on Main Street to end of town, passing railroad depot and viaduct. Next turn one and three-tenths miles. One block past Court House on same side of street is Hotel Lafayette. This hotel is the best between South Bend and Chicago. Special meal arrangements can be made by long distance telephone 991. One block beyond hotel is Zimmerman's garage—expert machinists always in waiting. After hours ring electric bell on side office door.

Memo .....

No. 528

Turn RIGHT, North. Next photo at group of barns and wind mill, two miles.

No. 527

Turn LEFT, West. Wind mills and group of barns on left. Next photo Wheeler, four and seven-tenths miles.

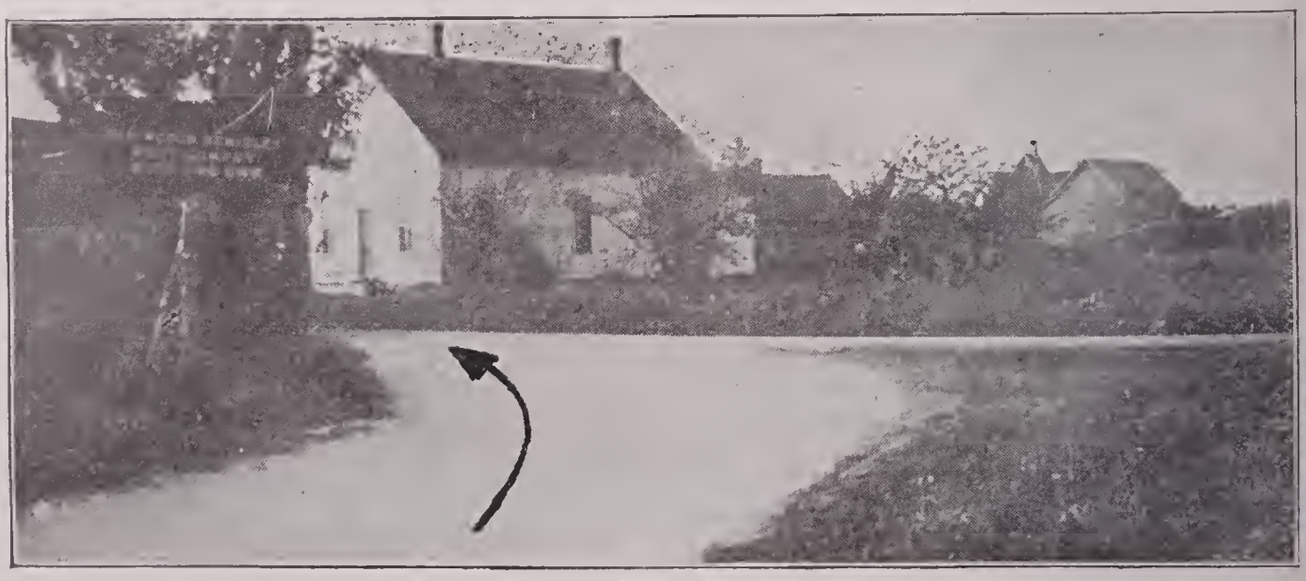
Memo .....

.....

.....

.....

No. 526



WHEELER

Turn LEFT entering Wheeler. Look out for disguised bumps just beyond turn. Next turn at street's end, five-tenths of a mile. Reduce speed in village.

No. 525

Turn RIGHT, North-West. Next photo at "S" turn, six-tenths of a mile.

Memo .....

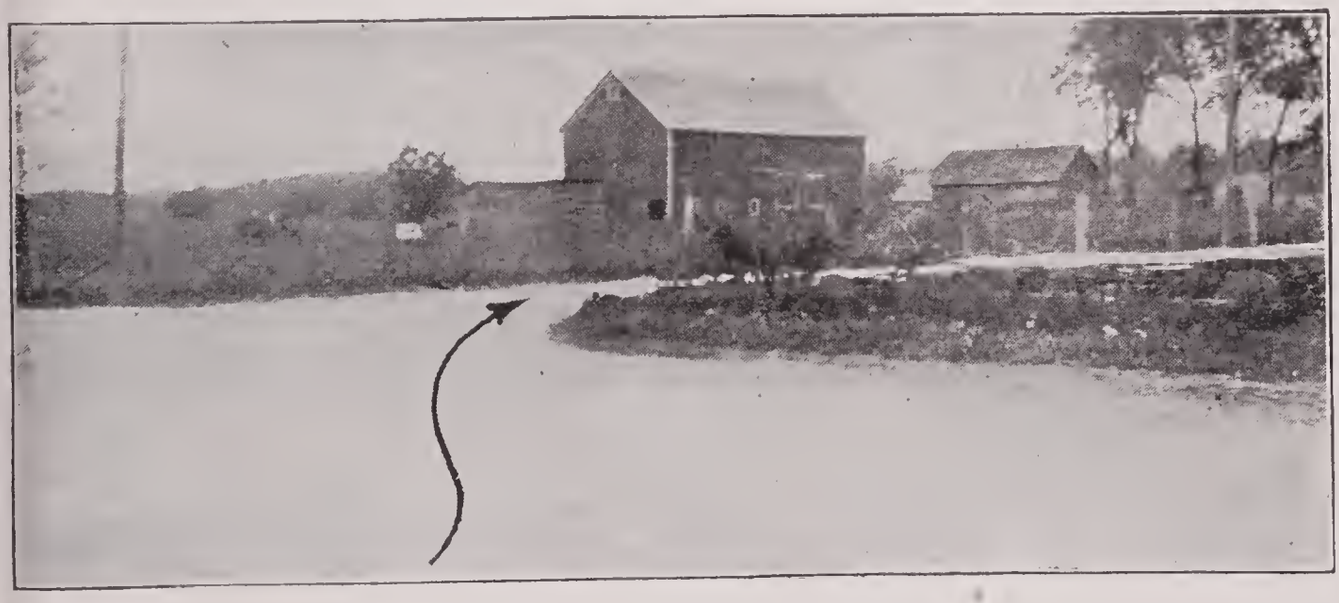
.....

.....

.....

.....

No. 524



Continue going North after making "S" turn. Follow wires. Next turn at road's end, one mile.

No. 523

Turn LEFT, West. Follow wires. Next turn Hobart, thre
and one-tenth miles.

Memo .....

.....

.....

.....

.....

No. 522

Turn LEFT and go South to street's end, then right. Ne
photo two-tenths of a mile.

No. 521

Turn LEFT, South. Hobart depot on left, turn right after passing depot. Next turn in Hobart, three-tenths of a mile.

Memo .....

.....

.....

.....

No. 520

HOBART

Turn RIGHT, North-West. Follow the wires. Next photo Highlands, eleven and three-tenths miles.

No. 519

HIGHLANDS

Turn LEFT, West. Next turn two and three-tenths miles.

Memo .....

No. 518

Turn RIGHT, North. Road-house on left. Next turn two and three-tenths miles.

No. 517

Turn LEFT, West. Saloon on right at turn. Next turn five-tenths of a mile.

Memo .....

.....

.....

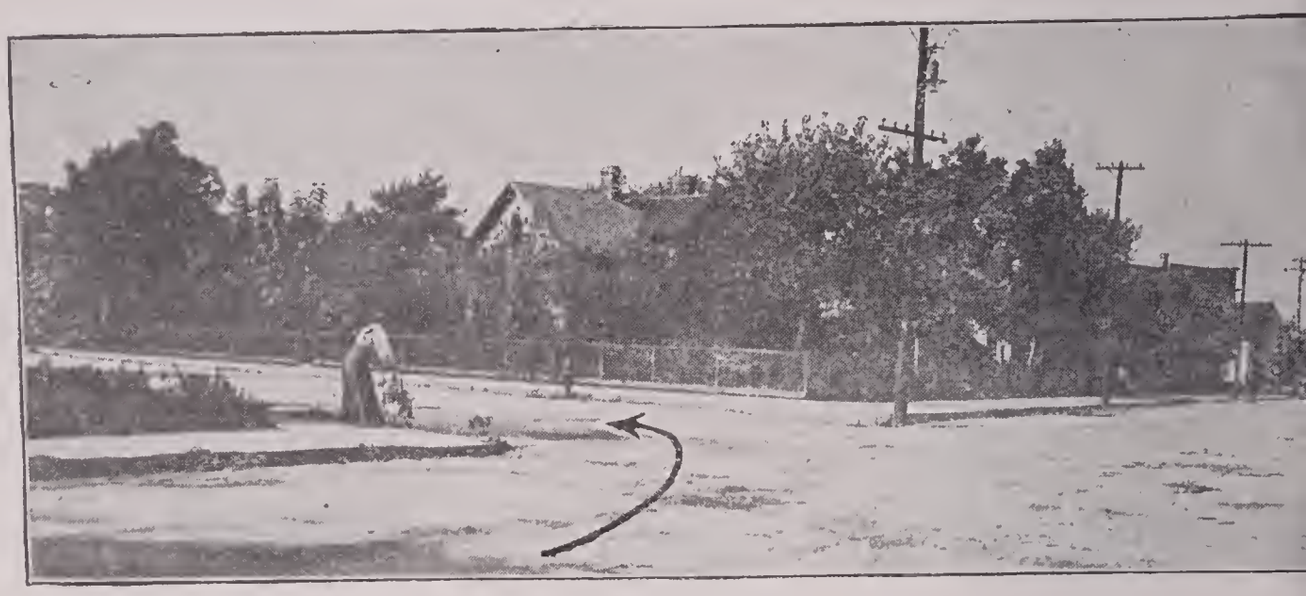
.....

.....

No. 516

Turn RIGHT, North. Next turn at Lafayette School, one and three-tenths miles.

No. 515



Turn LEFT, West. Lafayette School on right. Next tu
one mile.

Memo .....

.....

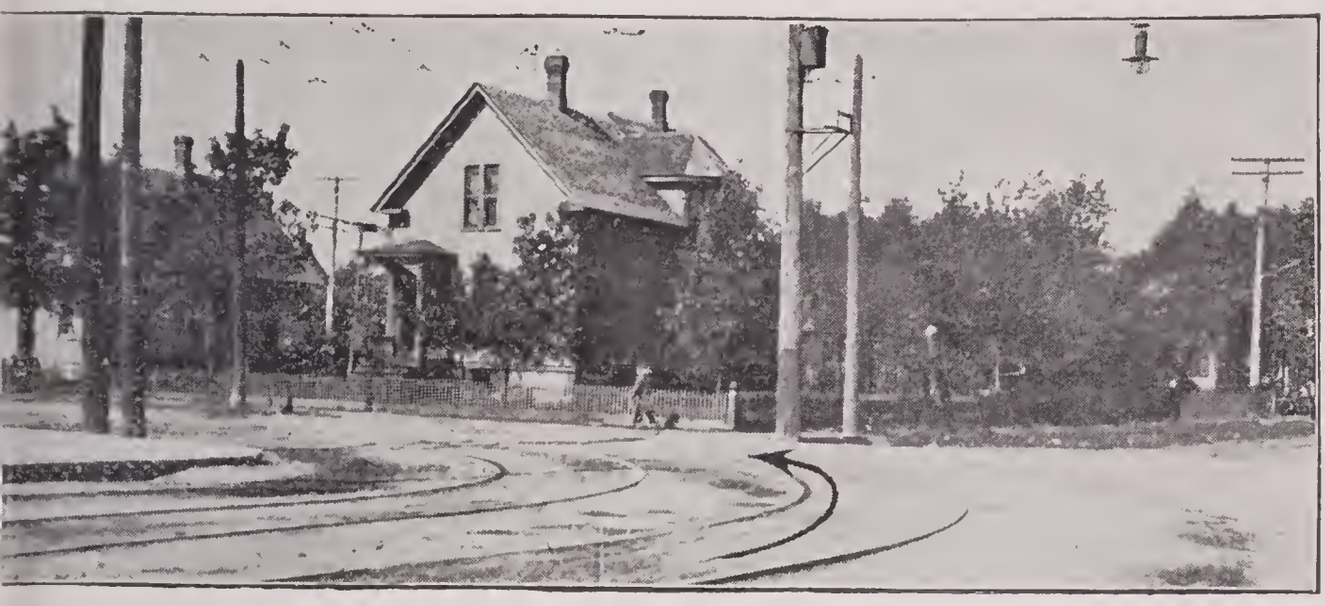
.....

No. 514

HAMMOND

Turn RIGHT, North. Turn right from Sibley Street to H
man Avenue. Half a block beyond turn is the Majest
Hotel and Cafe. The management extends first class ho
facilities to automobile parties. Next turn one mile.

No. 513



'urn LEFT and go West. Go one block west and turn with car tracks. Next turn four miles.

Memo .....

No. 512

urn LEFT, North-West. Follow car tracks to Ewing Avenue, two and one-tenth miles.

No. 511

Turn RIGHT and go North, Ewing and Indianapolis Ave nues. Follow car tracks across bridge to 92nd Street an Buffalo Avenue, one and eight-tenths miles.

Memo .....

.....

.....

No. 510

Turn LEFT, 92d Street, South Chicago. Continue Exchange Avenue. Next photo six-tenths of a mile.

No. 509

'urn RIGHT, Exchange Avenue, statue of Columbus on left. Next photo 83d Street, one mile.

Memo.....

.....

.....

.....

No. 508

urn LEFT. Follow macadam to Jeffrey Avenue, one mile.

No. 507

Turn RIGHT, Jeffrey Avenue, follow macadam North. Next photo two miles.

Memo.....

.....

.....

.....

No. 506

JACKSON PARK.

Enter park, turning LEFT upon first drive.

No. 505

Turn LEFT. Lagoon and stone bridge on right.

Memo.....

No. 504

Turn RIGHT. Lagoon on right.

No. 503

Turn LEFT, red-tiled rest building on left. Tennis cour
and Golf links on left.

Memo .....

.....

.....

.....

No. 502

Turn RIGHT, small police box on left.

No. 501

Turn LEFT, red-tiled boat building on right. Leave park. Continue straight West upon Midway Drive, passing under Illinois Central Railroad viaduct.

Memo.....

No. 500

MIDWAY DRIVE.

Keep STRAIGHT AHEAD, crossing Cottage Grove Avenue trolley, and enter Washington Park, turning right, passing administration buildings of parks on right, follow drive left to long, low building on left. (Refectory.)

No. 499

Keep to RIGHT and North. Refectory on left. Leave park at 51st Street. Grand Boulevard five-tenths of a mile.

Memo .....

No. 498

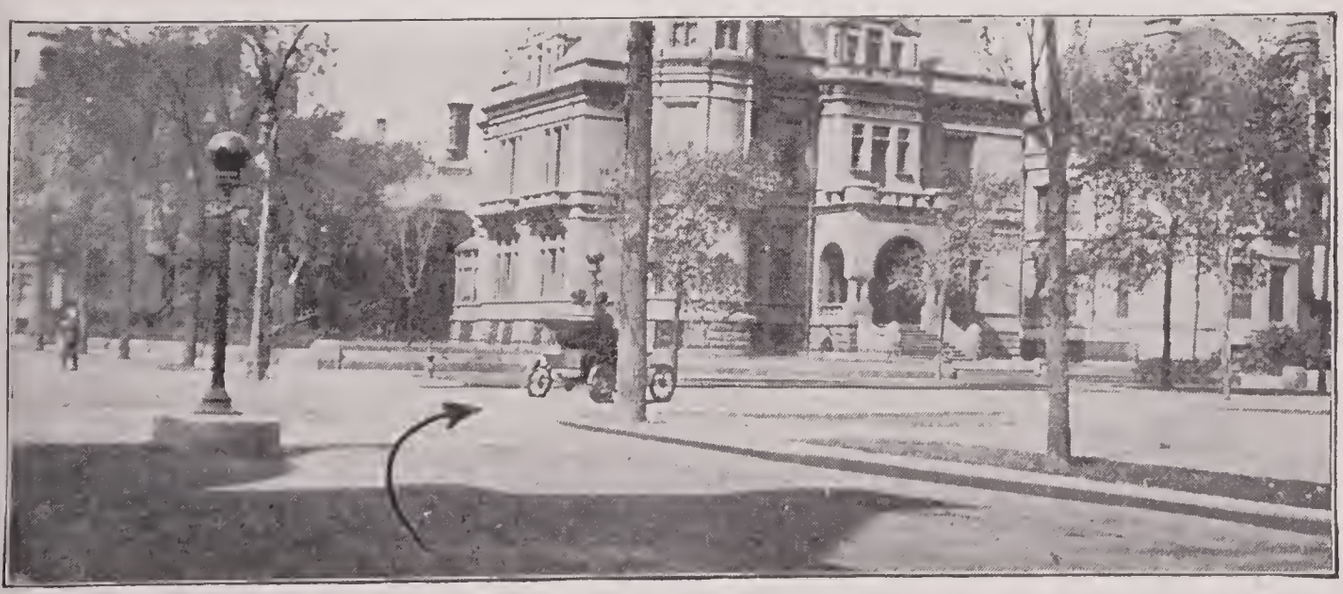
STRAIGHT AHEAD. Leave park at Grand Boulevard and 51st Street, passing statue of Washington. Next turn two miles, South Park Boulevard and 33rd Street.

No. 497

Turn LEFT and go West, South Park Boulevard and 33rd Street. Next turn Michigan Avenue and 33rd Street, four-tenths of a mile.

Memo .....

No. 496



Turn RIGHT and go North. Michigan Avenue and 33rd Street last turn.

No. 495

# NEW SOUTHERN HOTEL

MICHIGAN AVENUE AND 13th STREET, CHICAGO, ILL.

FINISHING POINT of Photo-Auto Maps in Chicago, Il is The New Southern Hotel, situated so convenient t "Automobile Row," it is really considered the very bes Hotel in Chicago for automobile tourists. A more deligh ful place for visitors in Chicago could not be conceive Their every convenience and comfort is studiously pr vided for. Splendid Cafe, Restaurant and Grill Room in connection. Good garage accommodations may b had one block south of Hotel.

Memo.....

*NOTHING ADDS MORE TO THE JOY OF TOURING THAN A SET OF*

# Reliance

REG. U.S. PAT. OFFICE

## SPARK PLUGS

## "THEY SPARK IN WATER"

MORE THAN ORDINARY

¶To be free from the most frequent of road trouble, dirty, sooty, short-circuited plugs, is a pleasure which is yours if you will use Reliance Spark Plugs.

¶Then again you will get more mileage out of your dry cells or batteries, for Reliance Spark Plugs are so constructed that the minimum amount of current is consumed and yet you will get the maximum heat in the spark.

¶Reliance Plugs are built according to correct electrical principles, no moving parts or valves being employed, and they require absolutely no cleaning or attention.

Our literature will tell you the whys and wherefores and impress upon you why Reliance Spark Plugs are *more than ordinary*.

Write today.

**JEFFERY-DEWITT COMPANY**

*SPARK PLUG MANUFACTURERS*

206 High Street Newark, New Jersey

# YOUR OLD CASING

is good enough for **5000 miles** more if equipped with a

## Triple Tread

This is a worn out casing as it comes to us to be MADE NEW

3-ply steel studded, specially prepared leather and made a part of the old tire.

**Puncture proof** and **non-skid.**

Costs very little more than the ordinary rubber retread.

**Remember we guarantee Triple Tread 5000 miles.**

Send the Old Casing at once.

When your old casing is MADE NEW it looks like this—Guaranteed 5000 miles.

**Triple Tread Auto Tire Mfg. Co.**

Phone Cal. 2456

**1545 Michigan Ave., Chicago**

---

# Cummer's Perfect Elastic

## *Auto Top Gloss*

**Automobile, Carriage Top and Upholstery Dressing**

For all kinds of Leather, Pantasote or Rubber.

PERFECT AUTO GLOSS

**For Tops, Seats, Guards, Straps and Upholstery**

Unexcelled for all kinds of Leather Upholstered Furniture such as Chairs, Sofas, etc.

Does not crack or come off. Perfectly waterproof. Dries in thirty minutes. Anyone can do the work.

THE JAMES W. CUMMER COMPANY

CLEVELAND, OHIO

**Write for Sample**

**At Your Dealers**
$3.00 per gallon
$1.75 per half gal.
90c per quart
**Or With Cash Order**

---

AKRON REPAIR KIT—$1.00 Complete

# NO MORE FLAT TIRES

**Just Carry an AKRON REPAIR KIT**

An acid cure process that vulcanizes the cement to the rubber, making it one solid piece, and by which any repair to your inner tube or casing is permanently made at any time and any place. **YOU ARE ON YOUR WAY IN A MOMENT**—and there is no hard work about it either, doesn't even soil your hands. Heat, moisture or hard usage will absolutely not affect a repair properly made with this cement and solution, and it's not injurious to the finest quality rubber.

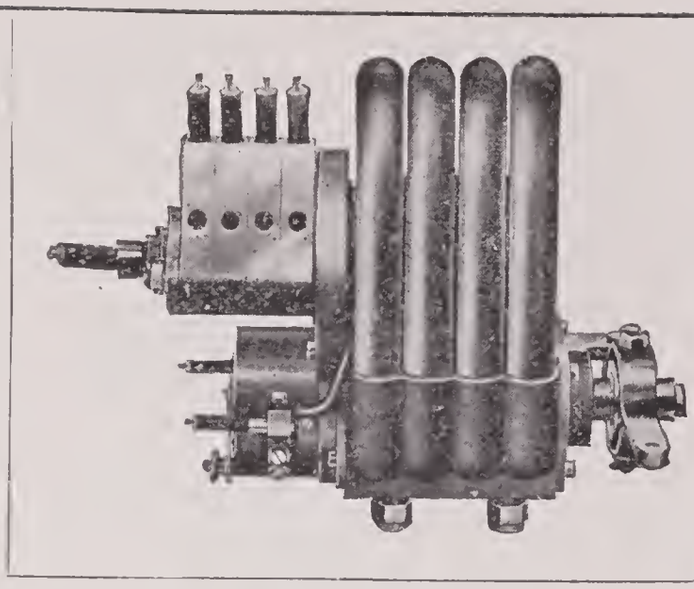
**A SEASON'S SUPPLY FOR THE MOTORIST**

all put up in a handy little box, with all needed tools, rubber patches, etc. For sale by dealers and jobbers. If your dealer does not handle it, write direct.

Write us about the "Akron" Tire Boot and "Akron" Inside Repair Patch. We also manufacture the "Hold Tight" Aluminum Vise for inner tube patching. Price, delivered, $1.25.

**THE EMPIRE MANUFACTURING COMPANY, AKRON, OHIO**

# A HEINZE MAGNETO



Will make a new motor out of your old one

## HEINZE ELECTRIC CO.

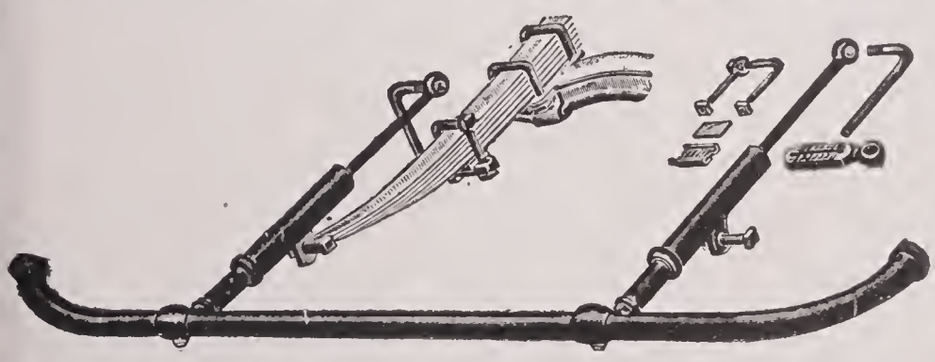
LOWELL, MASS.

Western Distributors

HIBBARD ENGINEERING CO.

DETROIT, MICH.

# McGREGOR SPRING BUMPER



An Economical Insurance against loss and inconvenience

Attractive in Design
Easily Attached

No Drilling of Frame
Fits All Cars

Has the points of merit of others as well as valuable features of its own

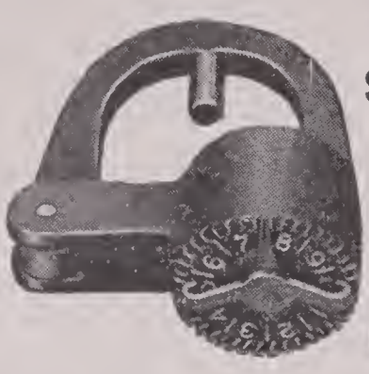
## LOWEST IN PRICE YET SELLS ON ITS MERITS

SOLD ONLY THROUGH DEALERS

Write for Special Introductory Offer

## McGREGOR BUMPER CO.

136 East 20th Street Chicago



## ROCHESTER SAFETY LOCK FOR AUTOMOBILES

*"A Lock that Locks"*

It is not necessary to drill your steering bar full of holes. Only one hole to drill and the lock is ready to place in position. Interchangeable combination. THIEF PROOF. Absolutely keyless. Ask your dealer or write direct for descriptive matter.

MOTOR CAR SUPPLY CO.
1451-53-55 Michigan Avenue
CHICAGO AGENTS

Our four-tumbler adjustable hasp Key Auto Lock will lock any automobile, motor cycle, bicycle, steamship gear, or can be used as a padlock. Also THIEF PROOF. Ask your dealer for prices or write us direct for descriptive matter.

## Rochester Safety Lock Co.

ROCHESTER, IND.

IS IT REASONABLE TO SUPPOSE that over sixty leading manufacturers of automobiles would use and recommend

TRADE MARK REGISTERED IN UNITED STATES PATENT OFFICE

## NON-FLUID OIL

for transmissions and bearings if these lubricants did not show best results in increasing efficiency, preventing wear, economizing gasoline and promoting cleanliness. Don't sacrifice your car for a doubt — try non-fluid oils

"IT SUITS BECAUSE IT DOESN'T SOOT"

## MoToRoL

TRADE MARK REGISTERED, U.S. PATENT OFFICE.

for cylinder lubrication **accomplishes** what **claimed** for other oils by lubricating effectively and economically without carbonizing. It increases engine efficiency — permits greater speed and power on less gasoline.

Sole Producers: NEW YORK & NEW JERSEY LUBRICANT CO., 165 Broadway, N. Y. City

## FIVE —GOOD— REASONS WHY

### "THAT STRANG" SPARK PLUG

SHOULD BE USED BY YOU

1.—"THAT" BROAD GUARANTEE The No-Trubble Plug. We hereby agree to replace any plug that fails to work or is defective in any manner whatsoever within one year from date of purchase.

2.—It is designed by LEWIS STRANG—THE WINNER Who KNOWS HOW A SPARK PLUG should be made

3.—IT'S MICA—But so made that it can not short circuit.

4.—THE BODY IS BRASS—will never rust and last, but not least.

5.—THE EASIEST PLUG TO CLEAN.

If your dealer does not **yet** handle "THAT STRANG" PLUG WRITE US AND WE WILL See that you are supplied

## LEWIS STRANG SUPPLY CO

2230 BROADWAY = = NEW YORK CITY

Keep Your Auto Radiator and Water Jacket Clean by Using

TRADE NONKORODA MARK

Automobile Radiator
and
Water Jacket Compound

Canister, $1.00

You can't afford to ruin your expensive Radiator and Water Jacket through corrosion, when it can be prevented for so small a cost.

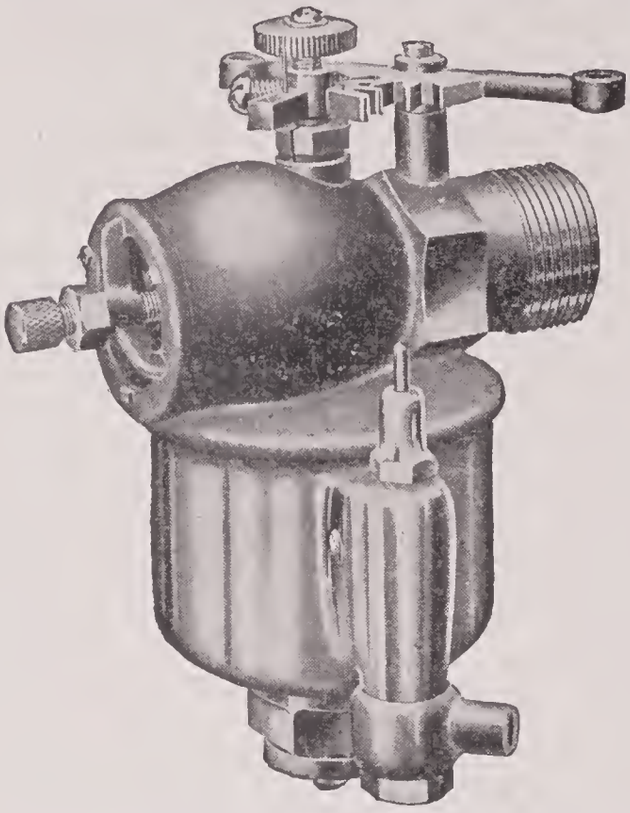
PREVENTS AND REMOVES

DIRT, RUST and GREASE from ENGINE WATER JACKETS and RADIATORS, CREATES a PERFECT CIRCULATION of the WATER and a COOL RUNNING ENGINE.

Sold by all Auto Supply Stores and Garages, or direct from

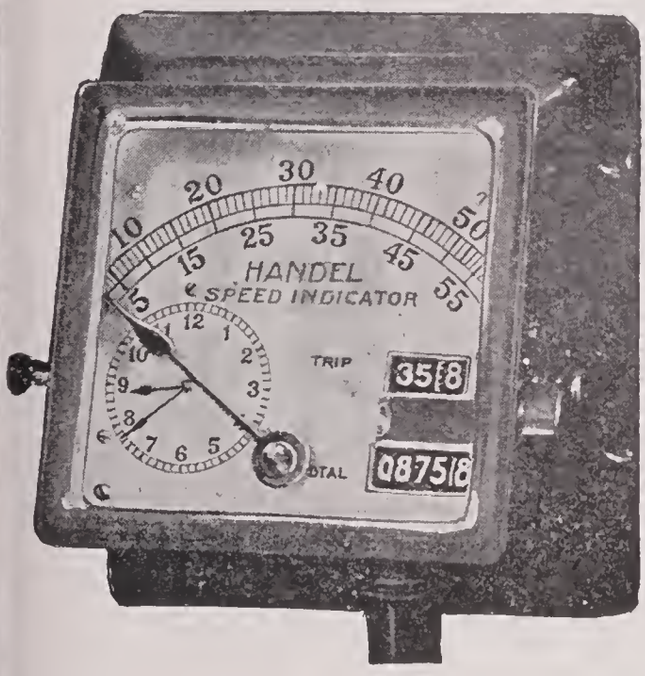
**The Nonkoroda Co.,**
25 and 27 New Chambers St., New York

MODEL "C"
# HEITGER CARBURETER



Made in all regular sizes. Special types for Ford and Buick runabouts. All guaranteed to give satisfaction or money back.

**HEITGER CARBURETER CO.**
225 W. South Street, INDIANAPOLIS, IND.




## Handel Speed Indicator

It is absolutely accurate
It is simply and compactly made
It does not get out of order
It stands the hardest usage
It is neat in appearance.
It is easily attached
It is guaranteed for five years
The hands do not waive and wobble.

# LOUIS HANDEL

MANUFACTURER AND SALES AGENT

176-180 GRAND STREET

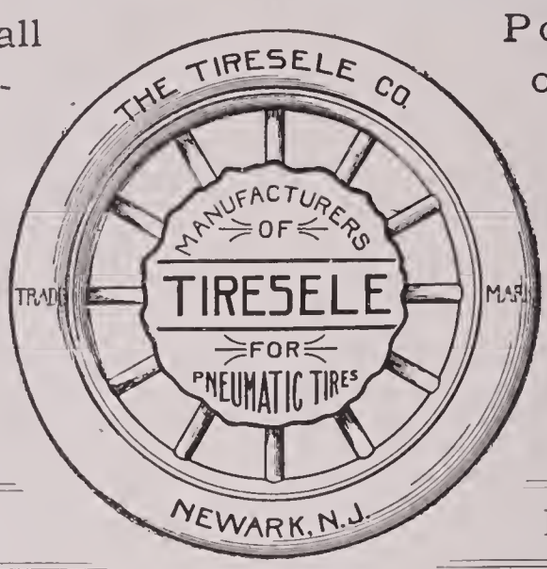
Write for Catalog

NEW YORK CITY

# TIRESELE

PREVENTS DELAY—LINGER AND WAIT—

takes care of all Porous or Punc-
tured tires—with- out removing the
Shoe. Also Motor Cycles, Bicycles
and all Pneu- matic tires —
last as long as tube — will not
gum up or get hard. Does not
in any way prevent vul-
canizing. Only two oz. to auto
wheel. Price, $2.50 per wheel.

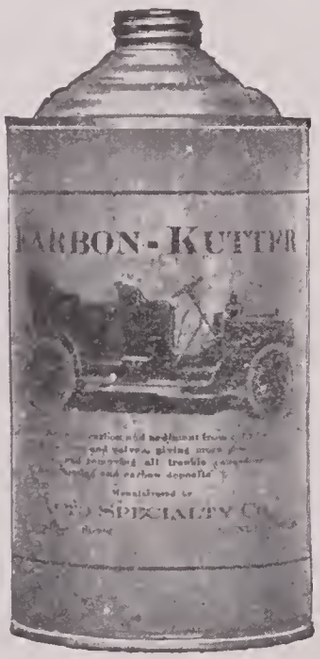



WRITE FOR BOOKLETS.

**THE TIRESELE CO., Manufacturers**

**53-55 Bank Street, NEWARK, N. J.**

Sold by MOTOR CAR SUPPLY COMPANY, CHICAGO, ILLINOIS




# KARBON KUTTER

## WILL SAVE YOU MONEY

Cleans thoroughly all carbon and sediment from motor without injury to any parts.

GARAGE MAN'S CHARGE for tearing down motor and scraping carbon, ten hours - - - - - - $6.50

OUR CHARGE—1 qt. KARBON KUTTER - - - 1.00

Saved - - - - - - - - - $5.50

A set of Scrapers free with each order for one dozen quarts.

**AUTO SPECIALTY CO.**

**330 NORTH ILLINOIS ST. - - - INDIANAPOLIS**

AUTOMOBILE BRAKE BAND LINING

HAS A REINFORCED CUSHION SURFACE. THAT TAKES UP ALL SUDDEN JARS AND PERMITS THE RIVETS TO BE COUNTERSUNK, THUS BRINGING THE WEAR ON THE LINING AND NOT ON THE RIVET HEAD

**GRIP=ON**
*Spells Economy*

IT IS SOLD UNDER AN ABSOLUTE GUARANTEE

For further particulars write

THE NEW YORK LEATHER BELTING COMPANY
EXCLUSIVE MANUFACTURERS

51 Beekman Street
NEW YORK

44 Franklin Street
CHICAGO

When passing through

Evansville

drop in and let us serve you

The finest Garage in southern Indiana. Our terms are right, and we don't care who knows it.

**THE FELLWOCK AUTO & MFG. CO.**

No. 3 Upper Fourth Street
EVANSVILLE, IND.
Opposite Court House

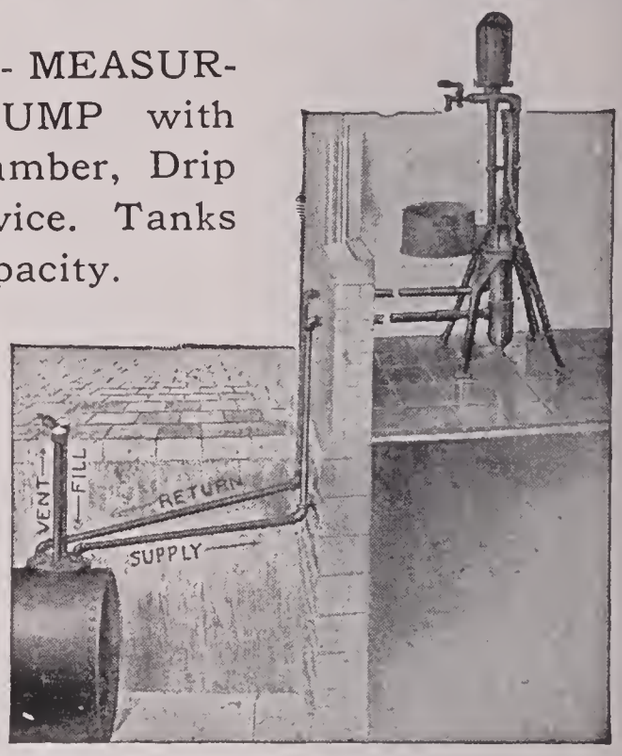
# The Tokheim Gasoline Outfit

Outfit consists of DOME SELF - MEASURING, PRICE COMPUTING PUMP with Tokheim Patent Priming Chamber, Drip Pan, Gauge Rod and Locking Device. Tanks furnished in any desired capacity.

Pump can be furnished with Special Three-Way Discharge Valve and with Counter which registers the amount discharged up to 9999 gallons and repeats.

WRITE FOR CATALOG

We manufacture twenty-five styles of SELF-MEASURING OIL OUTFITS.




Dome Outfit No. 4.

**THE TOKHEIM MFG. CO., CEDAR RAPIDS, IOWA**

## THE "MULTO" SOCKET RATCHET WRENCH

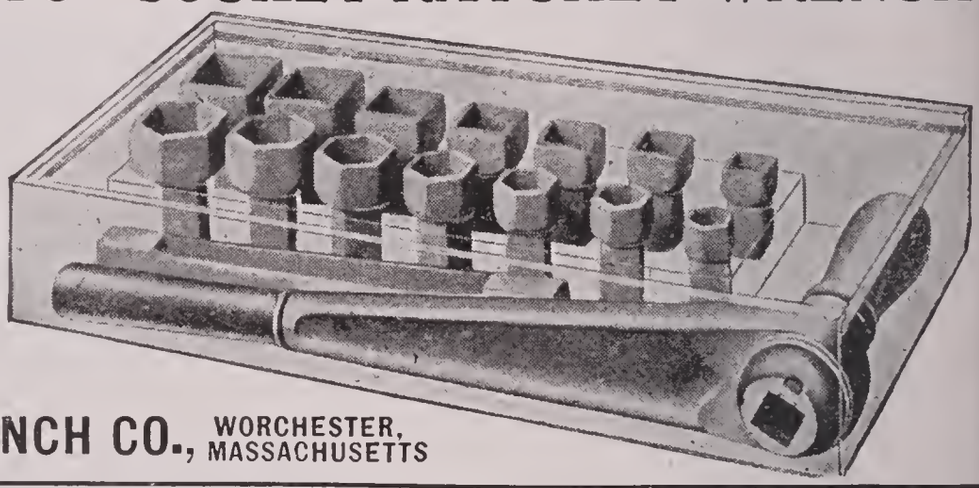
We make Wrenches all sizes from 5-16 to 5 in. sq., 5-8 to 5 in. hex.

This half-tone is from a photograph, showing our "Multo" Socket Wrench. Each Wrench with its fourteen sockets is packed in a substantial covered box.

All our Ratchet Wrenches are reversible and work right or left handed at pleasure without removing the Wrench.

All kinds and sizes.

Send for catalogue.



**LOWELL WRENCH CO., WORCHESTER, MASSACHUSETTS**

The use of "DUFFY'S" proves our claim
"ONCE A GREASE,
ALWAYS A GREASE"

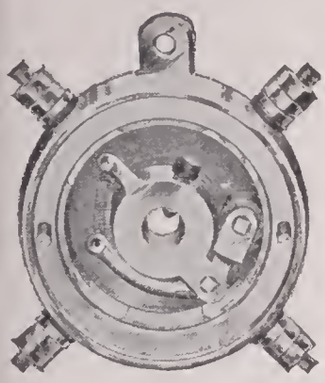
No waste or flushing on the brakes. Not affected by weather conditions. Used wherever a grease is used.

Try it

DUFFY GREASE COMPANY, Inc.
New York, N. Y.

# Timers and Distributors

OF EVERY KNOWN TYPE
FOR EVERY KNOWN SERVICE



We are specialists in this line and our experience and manufacturing facilities enable us to turn out large quantities for engine builders and dealers at very attractive prices. Jobbers and dealers write us for prices. Agents wanted in the West and on the Coast.

## The Altemus Manufacturing Co.

42d AND CHESTNUT STREETS
PHILADELPHIA, PA.

TRADE MARK
# Raybestos

## FRICTION FACING

Is made IN ONE PIECE from asbestos.

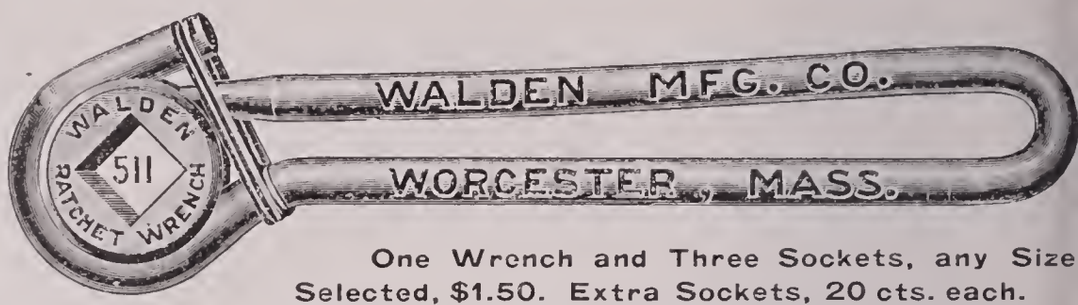
Is impregnated in such a manner that it is proof against heat, oil and grease.

Is an ABSOLUTELY DEPENDABLE Brake Lining. You owe to yourself to see that your brakes are lined with it, if you want to have complete control of your car on the steepest grades.

**ROYAL EQUIPMENT COMPANY**

**176 Housatonic Avenue** **BRIDGEPORT, CONN.**

STEEL SOCKETS FIT
No. 511




One Wrench and Three Sockets, any Size Selected, $1.50. Extra Sockets, 20 cts. each.

| Hexagonal Sizes Only to Fit Heads | |
|---|---|
| No. 06 | 3/8 |
| No. 08 | 1/2 |
| No. 09 | 9/16 |
| No. 010 | 5/8 |
| No. 011 | 11/16 |
| No. 012 | 3/4 |
| No. 014 | 7/8 |
| No. 015 | 15/16 |
| No. 016 | 1 |
| No. 017 | 1 1/16 |
| No. 018 | 1 1/8 |
| No. 020 | 1 1/4 |

**THE ONLY THREE-PIECE RATCHET WRENCH. NOTHING TO GET OUT OF ORDER. SIMPLEST POSSIBLE TOOL. THE HANDLE IS WIRE—BUT IT CAN'T BREAK—IT WON'T BEND—IT WILL STAND THE STRAIN—A STRONG, SERVICEABLE WRENCH, THOROUGHLY WELL MADE; Best of Selected Stock; Nickel Finish.**

| For Tire Lugs | | | |
|---|---|---|---|
| No. 28 | 1/2" | Hex. | $ .35 Each |
| No. 29 | 9/16" | Hex. | .35 Each |
| No. 212 | 3/4" | Hex. | .40 Each |

WE MAKE SPECIAL WRENCHES WE WANT YOUR INQUIRIES

TRADE MARK CLEANOLA REGISTERED

The Auto Polish of Quality.
Restores the shine and surface to the body, leather trimmings, cushions and top, prolongs the life of the finish and greatly improves the appearance of the car.

TRADE MARK SPE-DE-SHYNE REGISTERED

The Metal Polish with the Elbow Grease in the Can.
More Polish, Less Work.
Wipes Freely, Contains no Acid.
Imparts a brilliant lustre to all Metallic Surfaces.

SOLD BY ALL FIRST CLASS DEALERS IN AUTOMOBILE SUPPLIES

If your dealer hasn't got them in stock, write us for our

Thirty-Day Trial Offer

# THE CLEANOLA COMPANY

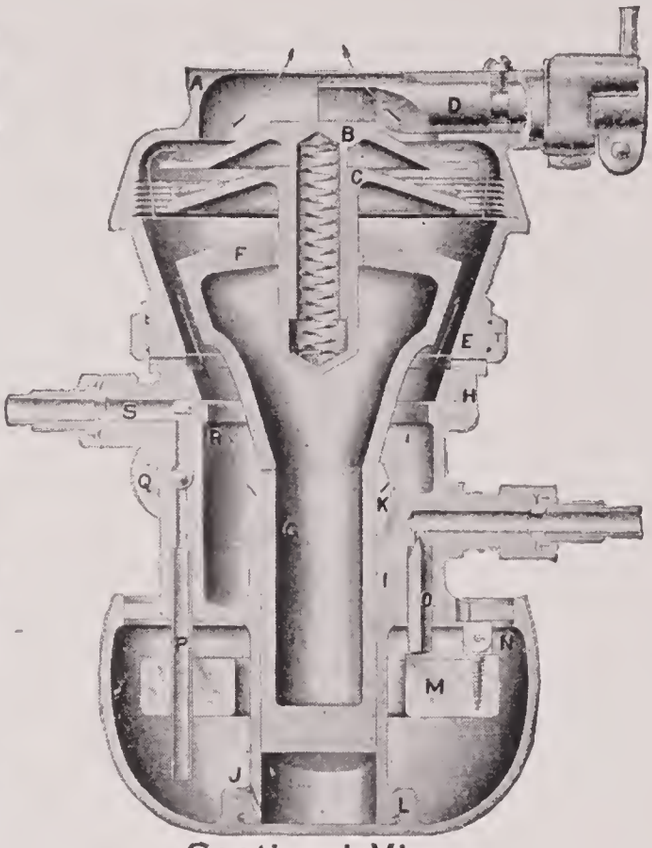
Fulton Building
PITTSBURG, PA.

53 West Van Buren Street
CHICAGO, ILL.

# New Principle

THE

# Stewart Precision Carburetor



Sectional View.

You want the maximum of POWER
on the minimum of FUEL.
You want quiet running and
a UNIFORM MIXTURE at all speeds.

THE

## STEWART PRECISION CARBURETOR

will get you these results better than any instrument you have ever used, or your money will be refunded.

### NEW PRINCIPLE.

The proportioning of air and gasoline is accomplished by **gravity,** acting on the one moving part, there being no **springs.**

### THE RESULT

is a consistent performance at all times. Write for descriptive matter

## Alfred C. Stewart Machine Works,

**LOS ANGELES, CAL.**

# FOUR GOOD THINGS

## MOBO AUTOMOBILE CLEANSER

is made as good as automobile soap can be made. It has a substantial body. Therefore it cleans easily, quickly and thoroughly. MOBO is also absolutely free from uncombined alkali. Because of this it works without injury. These things about MOBO mean much. They mean clean, bright cars, also long life to varnish and paint. Therefore we suggest—try MOBO—in 50c and $1.00 cans.

## SHOFO HAND CLEANSER

is made of Castile Soap, powdered Pumicestone and green Olive Oil. These three SHOFO ingredients show a quick, easy and effective working out. To explain, the Castile Soap washes, the Pumicestone scours and the Olive Oil keeps the skin soft. This SHOFO way of hand cleansing is ease, speed and delicacy combined. It is better than all others. Therefore we say—try SHOFO. In 10c and 20c cans.

## HYGLO METAL POLISH

is different from all other metal polishes. It is one that eliminates the wait-while-it-dries feature. Also that rub-rub-rub which does tire. Instead the HYGLO way is quick, easy and sure. Then further a HYGLO shine is always even and brilliant, and one also that stays long. In that regard a HYGLO shine is distinctly long-lived, and the only one that is a real all-day shine. 15c, 25c and $1.50 cans.

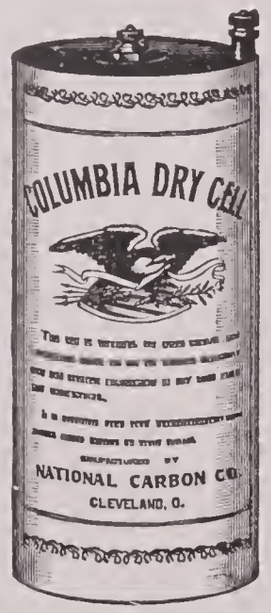
## LEVO WOOD POLISH

is good for cars minus part of the fine varnished finish they had when new. That because LEVO fills in digs and covers up bare spots. At the same time LEVO gives a polish equal to a new coat of varnish, which does not wear off quickly, or come off in washing, because LEVO is an oil preparation and is waterproof. So if your car shows varnish departed, but not enough to warrant the paint shop—Try LEVO, and it will make the car look new. In 25c, 50c and $1.00 bottles.

**JOHN T. STANLEY - MAKER - NEW YORK**

SOLD BY

**MOTOR CAR SUPPLY CO., 1451 MICHIGAN AVE., CHICAGO**




# BE GUIDED

by other MOTORISTS and equip your MACHINE with

**COLUMBIA**

**or COLUMBIA IGNITOR**

"RED TOP" dry cells.

Don't accept SUBSTITUTES which may spoil your trip. INSIST on getting COLUMBIA cells. They cost NO MORE.

No Extra Charge for Fahnestock Clips

**NATIONAL CARBON COMPANY CLEVELAND, OHIO**

**On Dunlop Type**

Over 8,000 miles with a Cadillac on Diamond Dunlop type tires and no tire trouble at all. That's what I think of the Diamond Dunlop Style of tires.

R. W. Emerson,
Central City, Ia.

# What's Your Car ?

**On Fisk Type**

My experience with Diamond Fisk Type or "bolted on" tires on my Stevens-Duryea has been so satisfactory that I shall certainly have none but Diamond in future.

N. L. Ely,
Peekskill, N. Y.

**Big or Little** **Diamond** **Heavy or Light**

## WRAPPED TREAD TIRES ARE FOR YOU

**On a Large Car**

I can well imagine that you receive many testimonials for Diamond tires, but I wish to add mine—that Diamond tires on my Peerless Car have been nothing short of extraordinarily fine.

Fred Hoke,
Indianapolis.

***Much Better***

***Cost No More***

Quick Detachable
Regular Clincher
Mechanical (Dunlop)
And Fisk Types

**On a Light Car**

As a physician using a runabout in practice, I drive the car very hard and the tires must bear the brunt of it. Am pleased to say I find Diamond tires much better than all the others I have used.

(Dr.) S. A. Muta,
West Orange, N. J.

***Ask For Our Tire Instruction Book — It's Free***

## THE DIAMOND RUBBER CO. AKRON, OHIO

All supply houses sell

***DYKES'***

# *Never Kreep Tire Shoes*

This shoe is specially prepared with a cement coating, ready for instant use. Clings to inside of casing, same as if vulcanized.

**John L. G. Dykes Co.**
**CHICAGO, U. S. A.**

# HAZARD OF NIGHT DRIVING

is reduced to the minimum only if you use reliable burners. The safety of both car and passengers depends then on this apparently unimportant little unit. "A chain is no stronger than its weakest link." No matter how good your lamps or gas supply, unless you have the best burner procurable. When your lamps are new from the factory, they are equipped with some style of Alco burner, for all important lamp makers use ALCO. Then why not insist on Alco again when replacing broken and worn out burners? All dealers sell—we do ***not*** sell to consumers direct.

Ask Dealer.

Alco DeLuxe Genuine German Lava. All gas sizes. Hexagon base (Pat. Dec. 24, 1907) permits easy installation with wrench or pliers.

**AMERICAN LAVA COMPANY**
**CHATTANOOGA, TENN.**

# Always See the Road

Have a **Williams Shield** put on your car while stopping over night.

1910

A Touring Car Shield When Top is Up — A Roadster Shield When Top is Down

All in One — Fits All Cars — Nothing Like It

***20th Century Motor Car Supply Co. ... Sole Mf'rs.***

Garage Department one block from Oliver Hotel. Open day and night. Machine Shop and Supplies

**121-125 South La Fayette Street, South Bend, Ind.**

# NEVER MIND THE PUNCTURE

*THAT* CAN BE REPAIRED WHEN YOU GET HOME

# A Detroit Emergency Wheel

attached to the rim of the wheel carrying the disabled tire, will enable you to drive for miles

**EASY TO PUT ON** — **LIGHT WEIGHT** — **REASONABLE PRICE**

**Can be attached in less than one minute without removing the punctured tire**

Ask Your Dealer for the ***Detroit*** Emergency Wheel

## SPECIAL

**Ford Magneto = = $25**

For **Ford Models N. R. S.**

**Maxwell Magneto $25**

For **Maxwell Two-Cylinders**

Does the work as well as any $75 Magneto. Does it far better than any cheaper Magneto. No special coil required. Works with your present equipment. Brackets and everything necessary for installing furnished. The only Magneto backed by a 30-day free trial. Not an experiment. There are thousands in use. Write for catalog M. Which have you, Ford or Maxwell?

**HERCULES ELECTRIC CO.** 2128 to 2136 Northwestern Ave. **INDIANAPOLIS, INDIANA**

# TIRES REPAIRED and VULCANIZED

Blowouts repaired. Sectional repairs made. Casings retreaded and recovered. Tube punctures vulcanized. Motor cycle tires repaired.—We give you a SQUARE DEAL and YOUR MONEY'S WORTH. We can guarantee our repairs, because we use the best materials, employ efficient workmen, and operate our well-equipped shop under up-to-date methods. **We Sell New Tires.** Our Aim is Our Motto: "Right and Reasonable."

THE MODEL VULCANIZING COMPANY

Phone: Calumet 531 — 1547 Michigan Avenue — Chicago, Illinois

# A DUCK BRAND LABEL

ON AUTOMOBILE WEARING APPAREL

***Means the Best of Its Kind At Any Price***

ALL LIVE DEALERS CARRY THE LINE

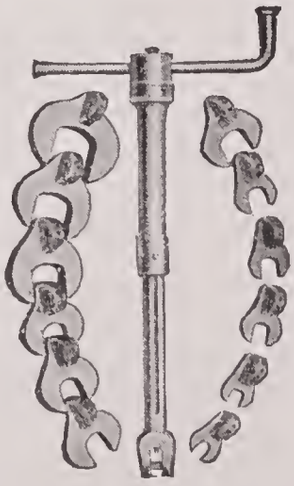
**Protector Coats, Dusters, Rubber Shirts**
**Cravenettes, Leggins, Corduroy Clothing**

**THE DUCK BRAND CO. =:= CHICAGO**

## *REX* Adjustable Wrench Sets

Extension Ratchet handle; Interchangeable heads; adjustable instantly to any position. Fits any nut, bolt or cap screw, square or hexagon, on any machine. All parts drop forged from high carbon steel and **ABSOLUTELY WARRANTED** against breakage.

*YOU NEED THIS WRENCH*



REX WRENCH CO.
Hathaway Bldg, Summer St. BOSTON, MASS.

THE WORD Thermoid
MEANS THAT GOODS SO BRANDED
ARE ABSOLUTELY CORRECT

Thermoid
BRAKE BAND LINING

Thermoid
TIRES AND INNER TUBES

MANUFACTURED BY THE
Thermoid RUBBER COMPANY
TRENTON, N. J.

THE ROAD TO SATISFACTION

Equip your car with the GRAY AUTOCHIME. The Pioneer and Aristocrat of exhaust-blown signals. Some unscrupulous jobbers and dealers are offering imitations at prices from $4.00 up. The Autochime sells for $10.00. It's more than worth the difference.
See the name on the bell.

GRAY-HAWLEY MFG. CO. DETROIT, MICH.

Superior Motor Car and Motor Boat Accessories

DIXON'S GRAPHITE MOTOR LUBRICANTS

Supply lubrication for practically every part of the car; cylinders, transmissions, differentials, bearings, etc. The service these lubricants render is due to DIXON'S TICONDEROGA FLAKE GRAPHITE — the finest lubricating graphite the world produces. Use Dixon's and increase your car's efficiency.

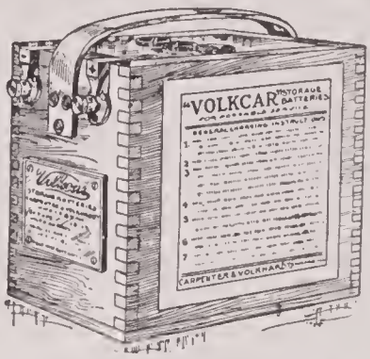
JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J.

# IN YOUR TRAVELS

YOU WILL NOT FIND A STORAGE BATTERY TO EQUAL THE

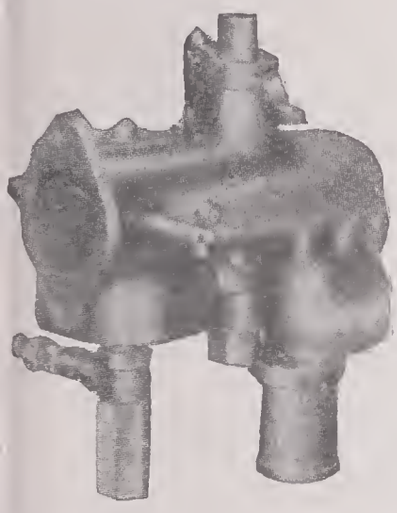
**VOLKCAR**

TRY ONE AT OUR EXPENSE




## CARPENTER & VOLKHARAT

2443 MICHIGAN BOULEVARD, CHICAGO, ILLINIOS



THE PRINCIPLE OF THE

## PETRE CARBURETTER

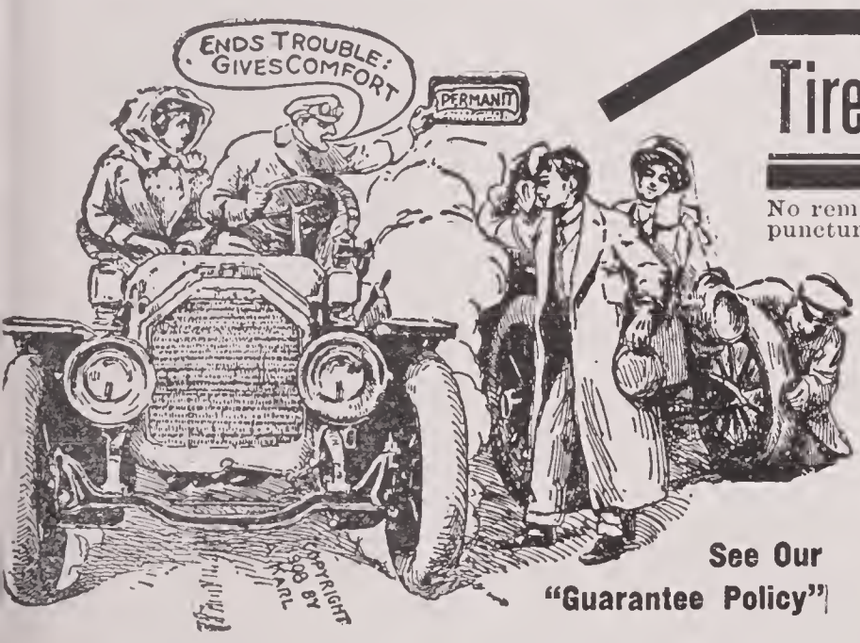
is exclusive. No other carburetter on the market has an automatically controlled needle valve which apportions the exact amount of gasoline for the given amount of air, making the **quality** of the mixture **constant,** whether running five or fifty miles per hour, up or down grade.

Notice that the needle valve and the air inlet are so affixed to the **same lever** that any movement of the air valve gives a correct and proportionate movement of the gasoline inlet, thus insuring a perfect mixture at all times, under all conditions.

**The Petre Carburetter** is guaranteed to

1. Start your Engine not later than the 3d quarter turn.
2. Give Greater Flexibility in Slow Running.
3. Greater Speed—By increasing **Quantity,** without changing the **Quality** of the mixture.
4. Greater Power in Hill Climbing—Same reason.
   (25 per cent. more power on topping a hill—and we can prove it.)
5. More Mileage—Less Consumption—Mixture is never too Rich.

**THE PETRE CARBURETTER CO.**
1839 Euclid Ave., Cleveland, O.




## Tire Problem Solved!

No remedy has been found that would heal punctured tires without injuring the rubber, until "PERMANIT" was discovered and put in practical use.

## "Permanit"

is imported from Europe and in use there for years and now in this country on the market for over a year and a half.

**See what our customers say about it:**

A prominent physician and ex-president of the Board of Trade writes:

"My Dear Sirs—I have used the auto car in the tires of which you put the material you call "PERMANIT," since November 21, 1907. It has not been necessary to pump up the tires since, although we have taken out of the tires several nails, tacks and pins. It appears to me to do the work."

We have many more similar to this and which are open to your investigation.

Refuse substitutes—let someone else try imitations **Why buy imitations when we can furnish you with the genuine?** Do not run any risk by trying something which has not been **fairly tested to stand all kinds of weather and roads.** "PERMANIT" has stood all these severe tests.

**See Our "Guarantee Policy"**

Sounds unbelievable, but it really does it. Besides, keeps the tires in good condition and increases their life.
Demonstrated before Board of Governors Harrisburg Motor Club with great success.
In your own interest write today and get full particulars and price and discounts to dealers, or send 53c for a sample carton which is sufficient for a bicycle tire.

## THE ADOLF KARL CO.

**245 Washington St. Newark, N. J.**

SOLE AGENTS: Alabama and Georgia—H. Craig Chapman, Title Guarantee Building, Birmingham, Ala. District of Columbia and Maryland—Jacobson Bros. The Luttrell Co., 1028 Connecticut Ave., N. W., Washington, D. C. Illinois—Legnard Bros., Waukegan, Ill. Nebraska, Kansas and Colorado—Dr. J. W. Puckett, Geneva, Neb. New York—Permanit Co., of New York, Thoroughfare Building, 57th Street and Broadway, New York.

# STA-RITE

**Ignition Plugs Stay Right The Longest**

TRADE MARK REG. U. S. PAT. OFFICE

No. 4A. Half-Inch Separable Double Porcelain
**Price - $1.25**

## "VULCAN"

TYPE OF STA-RITE PORCELAIN IGNITION PLUGS

Metric, No. 6, Single, Adjustable Sparking Point.
Price - - $1.25

A. L. A. M., No. 8A, Separable, Outside Sparking Points. ⅞-inch—18th. Original Autocar size. Price - $1.25

Winton, No. 15 A.
Price - - $1.25
Extra Long.

PART LIST

Porcelain Tube and Cap with Bolt, Point, Packings, Nuts and Springs. 50 cts.

With our double porcelains, the contraction and expansion is uniform, and cap protects inner heated tube. Practically no breakage or leakage with "VULCAN" STA-RITES.

**GUARANTEE:**
We agree to repair, free of charge, perpetually, any Sta-Rite Plugs returned to our factory, at any time.

## "VENUS"

TYPE OF STA-RITE MICA IGNITION PLUGS

A. L. A. M., No. 28A. Separable. Outside Sparking Points. ⅞-inch—18th. Original Autocar size. Price - $1.50

Metric, No. 48. French Metric. Separable, Outside Sparking Points. Copper Gasket Spun over shoulder.
Price - - $1.50

Thor, No. 51. Same as No. 48, except with special long bolt to fit Thor Motorcycle terminal. Price - $1.50

Hedstrom Plug for Indian Motorcycles. Price - $1.50

Mica Insulator, complete, threaded to fit Nos. 28A, 32A, 48, 51 and Hedstrom.
Price - - $1.25

All "Venus" Sta-Rite Mica Plugs are constructed with solid bolts from Bessemer steel rod, which do not stretch, and mica does not loosen. The inner India mica core is made with no shellac or other sticking substance. The perfect mica washers are compressed under great pressure, and machine turned to a finely glazed surface, which with ample air space is practically soot and waterproof, and cannot be broken in service.

No. 32 A.
Half-Inch Separable
**Price - $1.50**

## THE R. E. HARDY COMPANY

INCORPORATED 1900

**Factory, 201 37th Street, BROOKLYN, N. Y.** **Fisher Building, CHICAGO**

# Get a Stepney And Get There—Anywhere

No matter what kind of roads you have to travel, and no matter what kind of pneumatic tires you ride on, you are liable to have a puncture or blowout at any time. If you try to repair it on the road, it takes time and work--dirty work, too. If you continue your journey without attempting to mend the tire you will ruin it, and tires cost money.

## Just Get a Stepney and you Won't Have to Do Either

you won't even soil your hands. Simply attach it to the rim of the injured tire. Anybody can do it. One use of the *Stepney* usually pays for the device, but it can be used interminably. **Ask for the *Stepney* anywhere, and *get* it, or write for Catalog "A"**

## Spare Motor Wheel of America, Ltd.

GEO. S. MORROW, Sales Manager

*236 Michigan Avenue, Chicago*

# The IMPERIAL

## Non-Explosive Gasoline Tanks

One of the most important features in storing explosive liquids is the question of Safety

The IMPERIAL Non-explosive Tank is safe in **every** particular. It is scientifically impossible to explode any tank or can fitted with our non-explosive devices. Our tank is just as safe above ground as the other tanks that are buried.

Our over-ground system lasts ten times as long as the buried tanks, you get no water in your gasoline by your tank absorbing dampness from the ground or from sweating.

Write for our catalogue and full particulars.

THE UNIVERSAL SAFETY TANK & CAN COMPANY

72-78 North May Street CHICAGO, ILL.

PHONE, 3926 MONROE

# Empire Tires Wear Longest

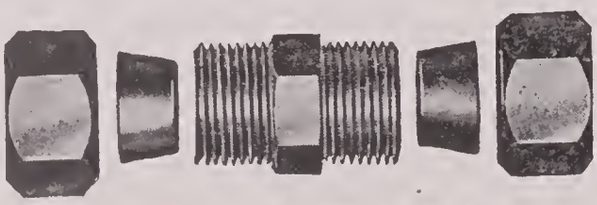
## EMPIRE AUTOMOBILE TIRE COMPANY, Trenton N. J.

### BRANCHES:

**Newark**—264 Halsey St. **Detroit**—842 Woodward Avenue. **Boston**—292 Devonshire Street. **Chicago**—1305 Michigan Ave. **New York**—73d St. and Broadway; 148 Chambers St.

### AGENCIES:

**Pittsburg**—Consumers' Auto Supply Company. **Kansas City, Mo.**—Empire Tire & Rubber Co. **Atlanta, Ga.**—Dunham Rubber Co. **Cleveland, Ohio**—Motor Supply Agency Co. **Norfolk, Va.**—Wm. H. Grover. **Denver, Col.**—Denver Auto Goods Co. **Jacksonville, Fla.**—Savell Rubber Co. **Philadelphia, Pa.**—Penn Auto Supply Co. **Los Angeles, Cal.**—Pacific Electrical Works. **Buffalo, N. Y.**—Empire Sales Co. **Minneapolis, Minn.**—Empire Tire & Rubber Co. **Savannah, Ga.**—Harris Tire Co. **New Orleans, La.**—H. A. Testard. **Boise, Idaho**—Randall Dodd Auto Co. **Kansas City, Mo.**—Auto Specialty Co. **Portland, Me.**—Jas. Bailey Co. **Providence, R. I.**—Waite Auto Supply Co. **Toledo, Ohio**—W. G. Nagel Elec. Co. **Syracuse, N. Y.**—Central City Rubber Co.



# IMPERIAL

## COMPRESSION COUPLINGS

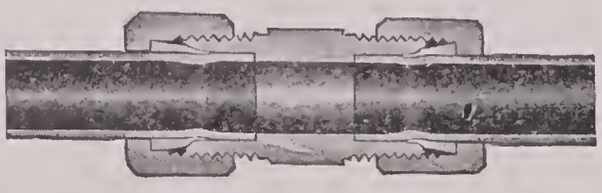
For connecting Copper, Steel, Brass and Aluminum tubing, without soldering, without flaring, without cement, or solder, especially adapted for Automobiles, Motor Boats and Gasoline Engines.

**BEWARE OF INFRINGEMENTS**

Write for Samples and Prices.

## Imperial Brass Mfg. Co.

245 S. Jefferson Street, CHICAGO



Patented Dec. 8, 1908.

# DON'T GO HOME ON THE RIM

## USE

1851 G&K

TRADE MARK
REG. U.S. PAT OFF.

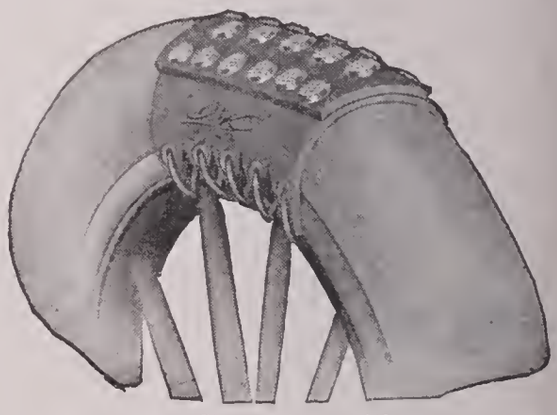
## TIRE SLEEVES

They are an "ever ready" relief for blow out troubles.

Heat and cold, mud and water, will not injure them.

Made in three sizes, viz:

No. 1. For 3-inch tire.
No. 2. For 3½-inch or 4-inch tire.
No. 3. For 4½-inch or 5-inch tire.



The Sleeve in position

Get them from your dealer or order direct from the manufacturers

## The Graton & Knight Mfg. Co., WORCESTER, MASSACHUSETTS

# WHEN IN INDIANAPOLIS

STOP AT THE

Packard

## GARAGE

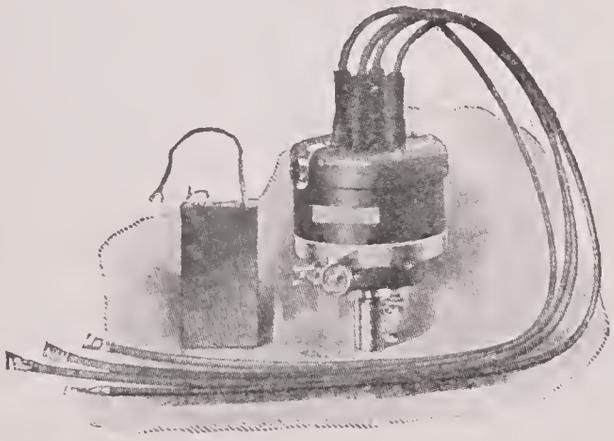
Up-to-date service. Full line of accessories and repairs. All leading makes of Tires, Presto-Lite Gas Tanks and other necessities always in stock.

OPEN DAY AND NIGHT

## WILLIS-HOLCOMB CO.

INDIANAPOLIS - - - 330 NORTH ILLINOIS ST.

# IT'S ALL THERE



You can install an American Igniter and make all connections in ten minutes. No trouble after that.

AMERICAN ELECTRIC FUSE COMPANY

MUSKEGON, MICH. NEW YORK, N. Y.

SEND US A TRIAL ORDER

Seen by naked eye.

## The first improvement in Prism Binoculars

Eighteen power magnification (other powers in proportion), with a field 607 feet in diameter, at one mile distance, as bright from edge to edge and every detail as sharply defined as in an opera glass, is what you get in the

# PERPLEX

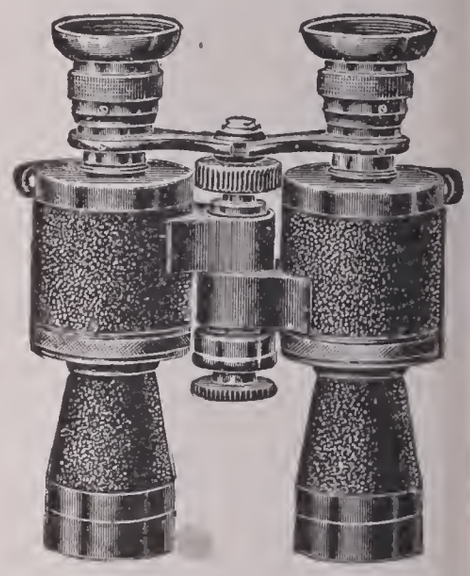
## PRISM BINOCULAR

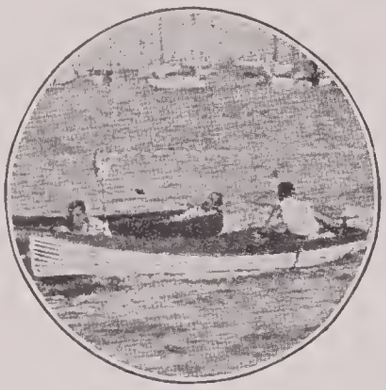
The Masterpiece of Optical Mechanism

Same object, same distance, seen through ordinary field glass.

Anyone can clean it, because it is mechanically perfect and impossible to misalign. Not silvered, therefore non-tarnishable and totally reflecting.

Sold by optical, sporting goods and marine supply dealers. If they *won't* supply we *will*, and guarantee to satisfy.





Same object, same distance, seen through Perplex Prism Binocular.

### FREE CATALOGUE

illustrating and describing the several powers, sent on request.

### AMERICAN THERMO WARE COMPANY

Sole American Distributors *16 Warren St., New York*

# OUR CATALOGUE IS AN

## *Encyclopaedia of AUTOMOBILE SUPPLIES*

### 534 PAGES

¶We have the Goods

¶Wire or write when in a hurry. We will give you what you want when you want it

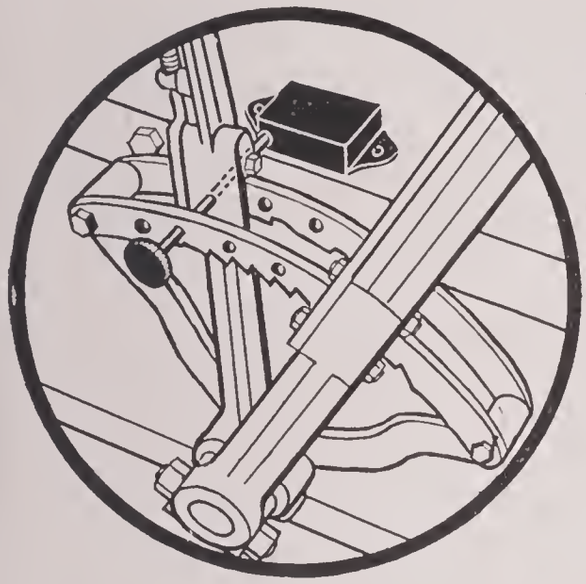
**Largest Auto Supply House in the World**

## MOTOR CAR SUPPLY COMPANY

*G. S. CHAPIN, M. D., President*

1451-1453-1455 MICHIGAN BOULEVARD, CHICAGO

# The Latest Invention!



MODEL A

Are YOU the owner of an Automobile?

Here is something interesting for YOU.

Is your Automobile under good care?
Have you stored your car in a Garage?
Do you employ a Chauffeur?
If so—DON'T WORRY!

Send at once for our new *"Auto-Lock"* because they will make your machine absolutely THIEF PROOF.

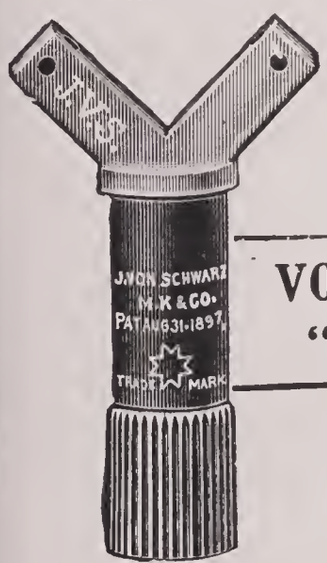
# THE BONGARTZ COMPANY

**6 Thoroughfare Building, Broadway & 57th Street**

**NEW YORK, U. S. A.**

# Watch the Auto Lamps as they come from :: :: the makers

VON SCHWARZ
"Perfection"




Imported

Some automobile manufacturers are particular about accessories which accompany the machine, and some are not. A dealer of accessories cannot afford to be indifferent about the quality of any article he receives and sells.

Every maker of a high grade automobile lamp and every experienced user will invariably insist upon the

**VON SCHWARZ "Perfection"** OR **CRESCENT "Victory"**

Makers of high grade lamps use no other than VON SCHWARZ "Perfection" or CRESCENT "Victory" on account of their

**Efficiency, Accuracy and Durability**

CRESCENT
"Victory"

Made of German Lava

Thousands of imitations of these burners are placed in lamps which are never tested, until started by the final owner, and user. The results are invariably disastrous.

**Beware of Imitations. Note Marks on Tips and Pillars**

**INSIST UPON THE GENUINE**

*FOR SALE EVERYWHERE!*

# STAR-AUTO-OIL

Light :: Medium :: Heavy

## ABSOLUTELY CARBONLESS

*Fluid Transmission Grease*

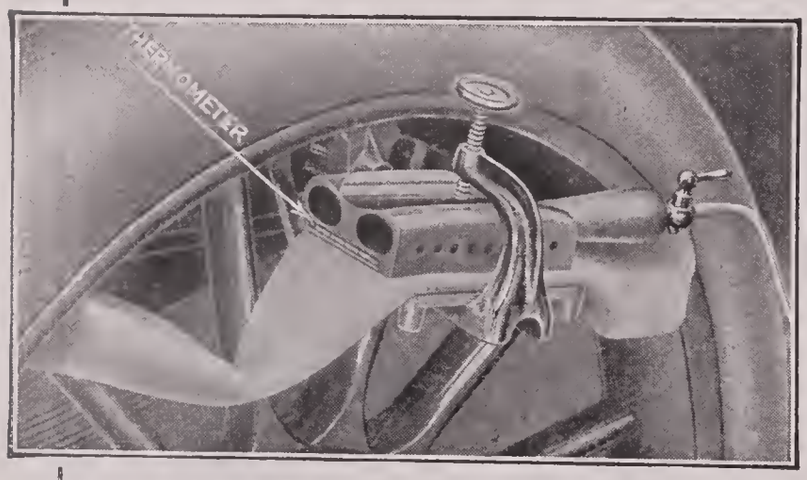
*700 Steamer Oil*

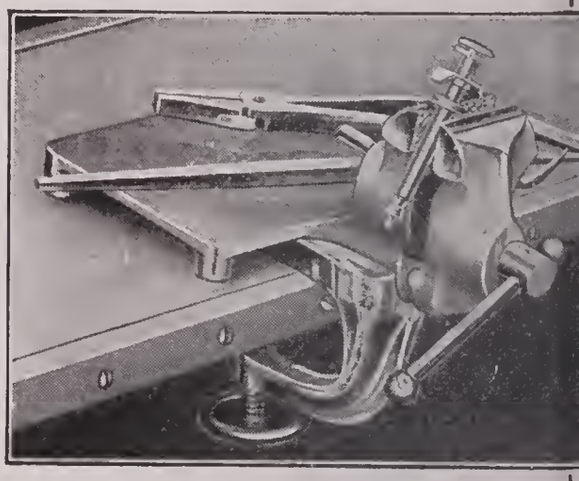
The "STAR BRAND LUBRICANTS" are the best that skill and long experience can produce.

## The Star Oil Company

307-313 South Desplaines Street :: :: Chicago, Illinois

# ECONOMY
## VISE AND VULCANIZER



Connect to gas tank or generator any where you happen to be. Any one can do perfect work. Guaranteed in every respect. Costs practically nothing to operate.

Price complete with Vise, $12.00. Send for Catalogue.

SOLD BY ALL SUPPLY HOUSES

Manufactured by

## GARAGE EQUIPMENT CO.
MILWAUKEE, WIS.

# Take These 3 Offers

*Offer 1*—A strongly bound copy of the masterful 104-page book, "How to Drive an Automobile,"—by Lougheed.

*Offer 2*—Six French Automobile-Posters (each measuring 10 x 16 inches), in a luxuriance of beautiful colors—all ready for framing or mounting on the wall.

*Offer 3*—A six-months' trial subscription to MoToR, the National Magazine of Motoring, at the special introductory price of only $1—in itself a straight saving of just 33⅓%.

## How These Three Great Offers Can Be Made By

The National Magazine **MoToR** of Motoring

¶ MoToR is for everybody interested in motor cars, either as a prospective buyer or as an owner of a motor car.

¶ No matter what information you want about motor cars—their parts or accessories—MoToR is the most reliable source.

¶ MoToR's editorial pages contain everything of interest to the motorist—descriptions of cars, parts, accessories, etc., touring articles, useful information—all attractively illuminated with beautiful pictures.

¶ MoToR's advertising pages are just as important to the reader, particularly to the prospective buyer, as the text pages. And who—veteran enthusiast, or novice—is not a prospective buyer? These interesting pages contain the very "cream" of the announcements of all the standard manufacturers of cars, parts, accessories, etc., in the world.

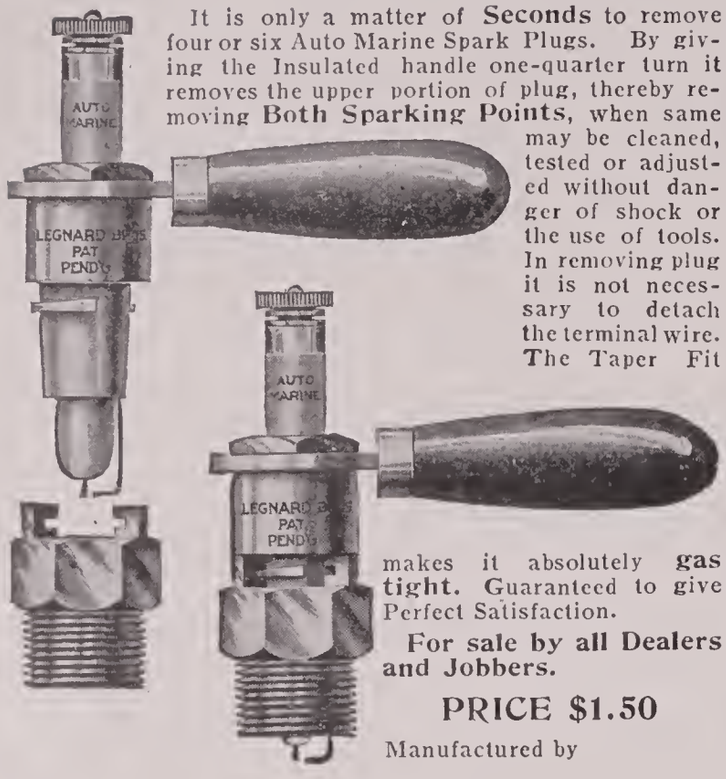
## The Reason

MoToR is now conducting one of the most extensive subscription campaigns that has probably ever been carried on by a similar publication. In order, therefore, to add 5,000 new subscriptions—entirely in addition to the maximum expected by the most exacting advertisers—MoToR, for a short time only, has determined to make ALL THREE special offers above.

¶ To secure ALL these three exceptional offers—the 104-page book "How to Drive an Automobile,"—the six large beautiful French Automobile Posters in color—and the six-months' introductory trial subscription to MoToR at a saving of 33⅓%—merely wrap up a dollar bill and mail it to-day at our risk—now—before this special time-limited offer is withdrawn.

**Address—to-day—MoToR Room 226, 2 Duane Street, New York City**

# The Auto Marine Spark Plug




It is only a matter of **Seconds** to remove four or six Auto Marine Spark Plugs. By giving the Insulated handle one-quarter turn it removes the upper portion of plug, thereby removing **Both Sparking Points**, when same may be cleaned, tested or adjusted without danger of shock or the use of tools. In removing plug it is not necessary to detach the terminal wire. The Taper Fit makes it absolutely **gas tight.** Guaranteed to give Perfect Satisfaction.

**For sale by all Dealers and Jobbers.**

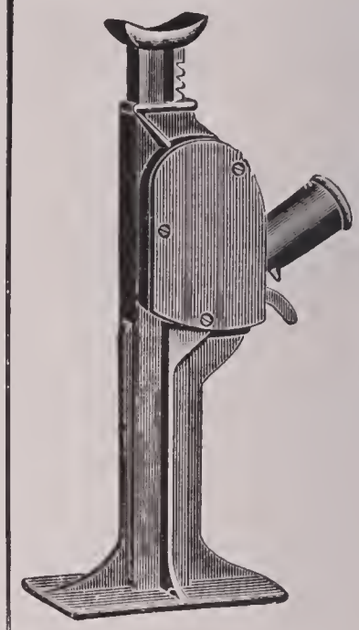
PRICE $1.50

Manufactured by

**LEGNARD BROS., Inc.**

**WAUKEGAN, ILL.**

---



**National Jack & M'f'g. Co.**

143—145 Sou
Clinton Street,
Chicago, Illinoi

Manufacturers of all kinds of Lifting Jacks, Tire Irons, Tire Tools, Spark Plug Wrenches.

Write for Circular and Discount

PHONE: FRANKLIN 119

---

COSTS LESS — WORKS BEST

**ALBANY GREASE**

LUBRICATING COMPOUND — TRADE MARK — ALBANY — EZR IC

THE PERFECT LUBRICANT

REG U.S. PAT OFF

EQUALLY GOOD FOR AUTOMOBILES AND MOTORBOATS

**ADAM COOK'S SONS, NEW YORK**

---

Expert Automobile Tire Repairing and Vulcanizing in all its branches, also dealers in all high-grade Tires.

**Akron Tire & Vulcanizing Co**

**Jackson Blvd. and Sangamon S**

CHICAGO, ILL.

The finest Equipped Repair Shop in the United States. We employ only factory experts.
Work called for and delivered.

**Drop us a Card or Phone Monroe 110**

---

# Leon Mann Co.

*The Cravenette House*

699 Broadway New York City

Specialists in MOTOR CLOTHES FOR MEN AND WOMEN

The ideal in automobile coats is realized in our coats equipped with our

"Presto" Convertible Collar

Patented May 18, 1909

"A simple twist of the wrist" changes this coat from a handsome street coat with regular lapels, to a splendid military collar automobile coat, perfect protection against wind, dust and rain. Insist on a "Presto" collar on your coat.

---

**STEEL TOOL AND BATTER**

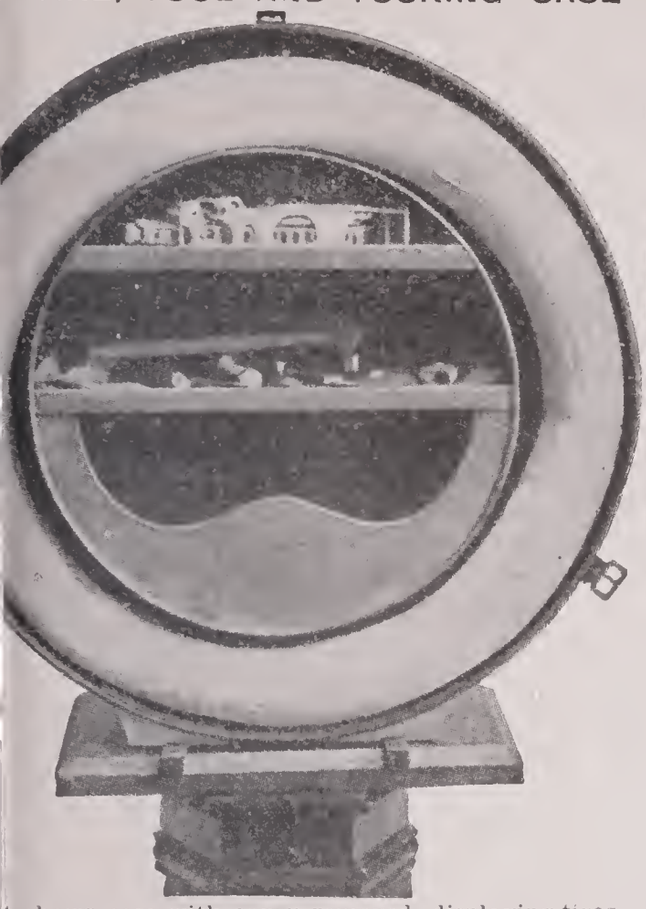
**BOXES**

ASK FOR CATALO

**THE GLOBE MACHINE & STAMPING C**

CLEVELAND, OHIO

## TIRE, TOOL AND TOURING CASE



t shows case with cover removed, displaying tires, tools, etc. The lower space within the circle holds aps, gloves inner tubes—or any articles used in tour- The tire space takes two shoes, the upper spaces a full uipment, thus doing away with all other appliances rrying extras. The cost of the Dow Tire and Tool much less than that of the many pieces of equipment l if this case is not used on your car. Patent pending.

TOR CAR SUPPLY COMPANY, Chicago Agents.

MERRILL MANUFACTURING CO., Sole Owners and nufacturers. Old South Building. Boston, Mass.

# You Can Control This Automobile Horn Perfectly

This Sireno Electric Horn is so flexible that by varying the pressure on the switch you can produce a gentle purr for the city streets, or a blast that can be heard over a mile away in the country.

The Sierno produces a powerful, musica note. It starts instantly, yet the minute the switch is released a patented, magnetic brake automatically stops the motor.

### Electrically Operated

The Sireno is reliable, for it is operated by the regular six-volt ignition battery. It is independent of the engine—never fails to work—doesn't drain the ignition battery. And if you have a magneto, any six-volt battery will run the horn. The Sireno is built of the best materials and is beautifully finished. It is light—compact—easily put on your car in a few minutes.

The Sireno is ball-bearing throughout—self cleaning—perfectly protected from dust and water. It needs no care—has no vibrator—nothing to wear. And you can place the switch wherever you want it. Price $35 complete.

### THE SIRENO JUNIOR

Built on the same principle as the Sireno, except that it is smaller—produces a lesser volume of sound—and has no automatic brake. A wonderful horn at $25—suitable for any car. For summer touring, there is no better horn for any car than the Sireno Junior with the long Projector. Its note will carry for almost two miles on a country road. Price, complete, $28.

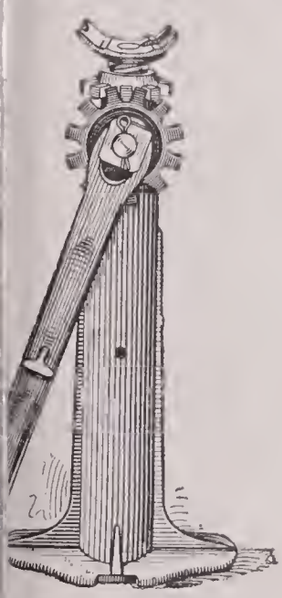
If your dealer hasn't the Sireno, send us $35—or $25 for the Junior—and let us ship you a Sireno. If you are not satisfied that it is the best horn made, return it to us. We will refund your money at once. But write immediately. We may not be able to fill your order if delayed. Address Department "S."

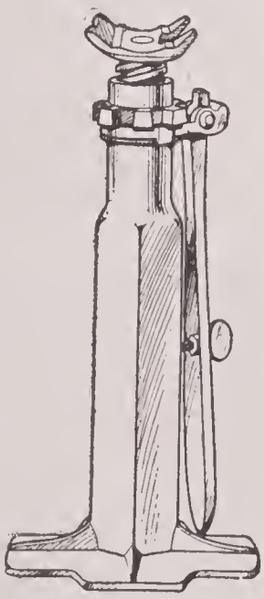
**The SirenO Co., 39-41 Cortlandt St., N. Y.**

# JACKS!

## S. AND ATLAS AUTO JACKS

Patent Allowed.





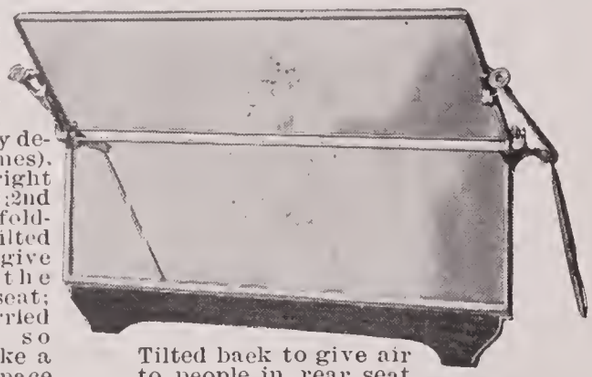
07 Atlas Nos. 1, 2, 3. U. S. Jack No. 1.

ight over all, No. 1 10 inches. No. 2, 11 3-4 inches.
it No. 1, 5 lbs; No. 2, 6 lbs.
e lever has an up and down motion. It is slotted at d so as to move in or out, to engage from 1 to 4 teeth wheel.
e head revolves on the end of the screw so that the an be worked at any angle or in cramped places. The its the truss brace, round or square axle.
ises any automobile with wheels 22 inches or over.
u cannot have an accident with this jack.
e screw is one inch in diameter.
r quick work raise the screw up against the axle and e nut down until tight then two or three strokes of er raises the wheel.
ood jack is just as essential as good roads.
that your car is equipped with either a U. S. or Atlas Simple, durable, guaranteed.
t price, No. 1 $2.50; No. 2 $3.00.

JACK COMPANY, 128 West Lake Street, Chicago.

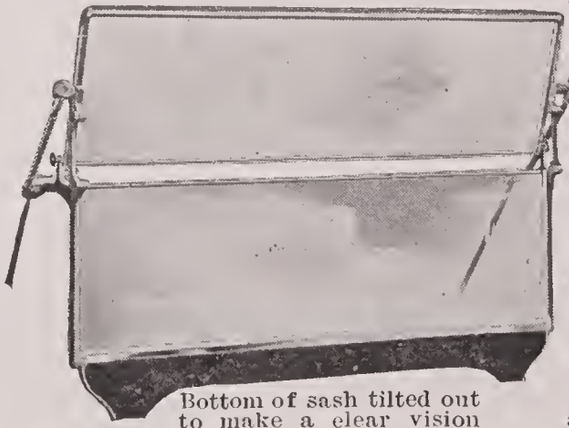
SAFETY REQUIRES ABOVE ALL AN UNBREAKABLE FRAME.

**Col. Sprague's New Air Cushioned "Leader" Wind Shield.**



Tilted back to give air to people in rear seat and still keep out storm.

It can be rigidly held in four positions (the only desirable ones). 1st. Upright or closed; 2nd Down or folded; 3d. Tilted back to give air to the back seat; 4th. Carried forward so as to make a clear space between the upper and lower sash, so you can see your way in rainy weather. Our air cushion locking device works easily and positively and holds the shield rigidly in each of the above positions. It cannot get out of order.



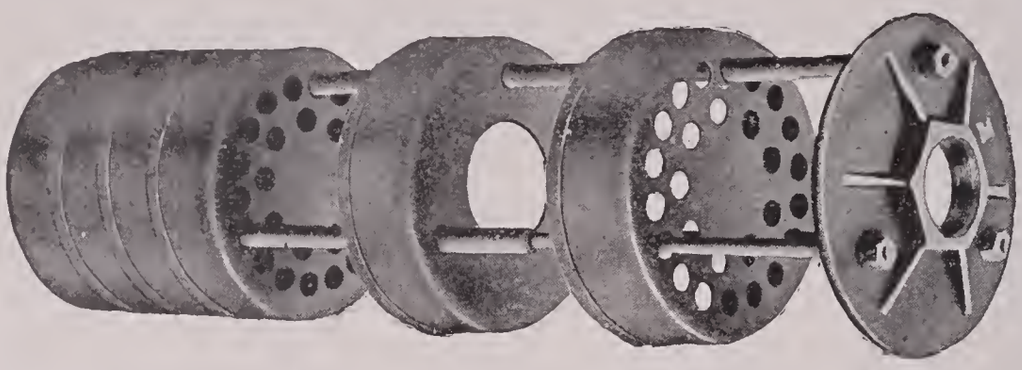
Bottom of sash tilted out to make a clear vision space in case of rain and still keep out the storm.

Do you know of any other shield that has all of these important features combined?

Catalog and price list sent on demand. N. B. All of our shields are made to fasten on the dash with clips. Where side standards are wanted we charge $1.50 net extra, including dash fixtures.

THE SPRAGUE UMBRELLA COMPANY, Norwalk, Ohio.

## POWELL PRESSED STEEL MUFFLER, PATENTED



In ordering state size of engine cylinder and number, size of exhaust pipe and whether standard pipe, steel or flanged connection is used.

We recommend a 15 or 16 section for a 40 to 50 horse-power automobile engine.

**POWELL MUFFLER & TIMER CO., UTICA, N. Y.**

## Lucas AUTO-KLEAN

Instantly removes dust, grease and grime. Restores the original brilliancy of the polished parts—wood, metal or fabric—without the slightest injury.

PRICES (DISCOUNTS TO DEALERS)

| | | | |
|---|---|---|---|
| 1 Gallon cans | $2.50 each | 1 Pint cans | $ .60 each |
| ½ Gallon cans | 1.00 each | ½ Pint cans | .35 each |

DUST-PROOF CANS

**John Lucas & Co.**

PHILADELPHIA NEW YORK CHICAGO BOSTON

## MAT'S Automobile Body and Leather Dressing POLISH

Prevents finish from cracking or staining. Absolutely no sediment. Positively no acids used. As a preservative, it has no equal. It dries quickly, softens the leather, and renders it waterproof.

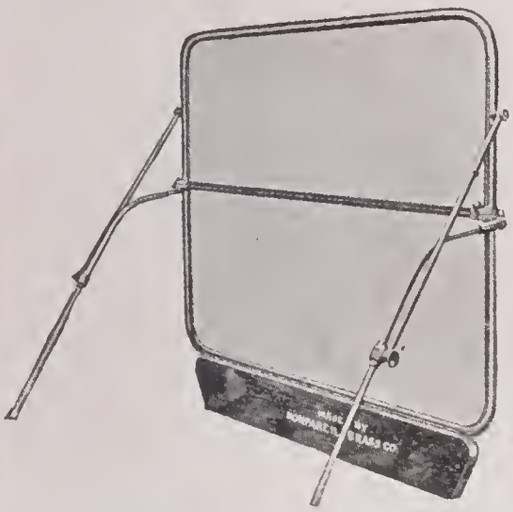
For sale by all automobile supply and accessory dealers.

**WEISS POLISH WORKS**
Chicago, Illinois, U. S. A.

## NATHAN'S LOCK FLAP TIRE COVER

The Lock Flap insures your tire's against Water, Oil, etc.
Perfect Fitting.

**NATHAN NOVELTY MFG. CO.,**
84 to 90 Reade St., N. Y. C.



## The Nonpareil Folding Wind Shields

Selected Plate Glass—Solid Brass Tubing—Mahogany

Represents the Finest Product of the Wind Shield Art. Light, Durable and Will Not Rattle.

Furnished with Filler Board to cut for any make of car.

No. 25, Solid Brass Tubing, similar to cut, complete, $35.00.

Equipped to car at our factory, or boxed F. O. B.

No. 35, Selected Mahogany, Brass Bound, $25.00.

**NONPAREIL BRASS CO.**

143 Summer St. PROVIDENCE, R. I.

NO MORE HAND PUMPING!!!

—THE—

## A-B-C ENGINE-DRIVEN TIRE PUMP

Eliminates the use of **ALL** hand-pumps Easily attached to **ANY CAR**

SMALL, LIGHT, CONVENIENT 110 LBS. PRESSURE IN 4 1-2 MINUTES

SEND FOR FULL INFORMATION

**ARTIZAN BRASS COMPANY**

206 LINCOLN PARK BLVD. CHICAGO

## FRED MIHELL & CO.

321 S. Jefferson Street CHICAGO, ILL.

Manufacturers of all Grades

## Cotton and Woolen Waste

also

Steam Washed and Sterilized Wiping, Dusting and Polishing Cloths, Cheese Cloth, Mill Ends, Mops, Etc.

Prices and Samples Furnished Upon Application

Headquarters for Automobile Tires and Automobile Accessories

## INDIA RUBBER TIRE CO.

1461 Michigan Ave., Chicago, Ill.

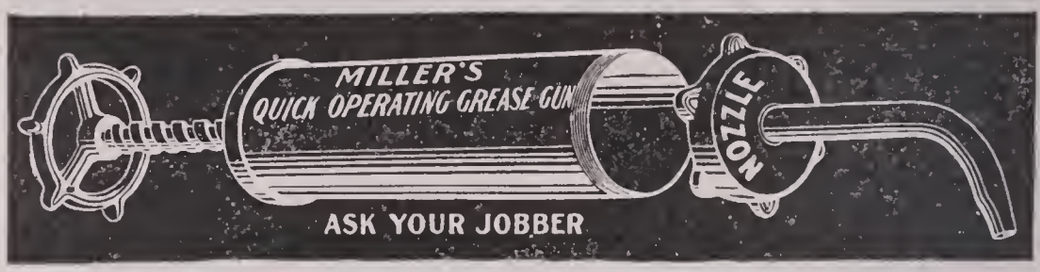
We are sole distributers of Everbrite Metal Polish

Let us send you sample can and you will use no other Metal Polish

# MILLER'S STANDARD QUICK OPERATING GREASE GUN

FILLS A LONG FELT WANT

STRONG

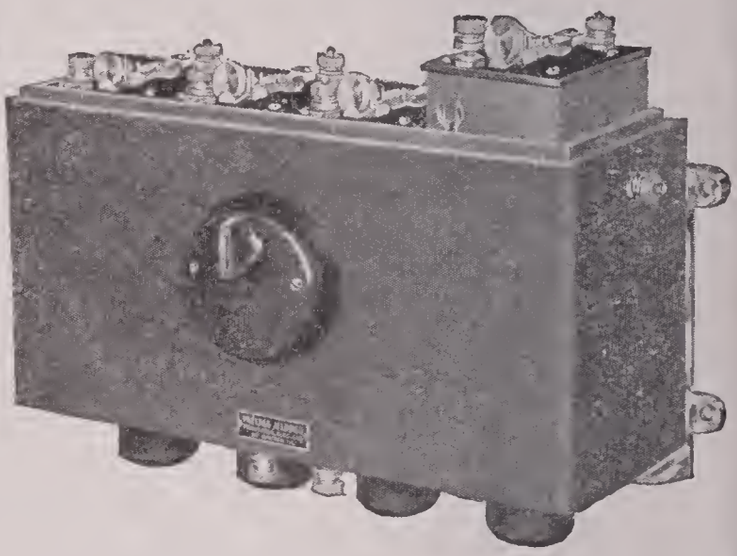



RELIABLE

FILLED AND EMPTIED IN THIRTY SECONDS

$2.00 FULLY GUARANTEED $2.00

# PFANSTIEHL COILS



All windings guaranteed absolutely for five years. Constructed by our patented methods. The most advanced coil on the market. High grade workmanship. No "Freak" Features. Built along practical and scientific lines. The lowest priced strictly high-grade coil. Our pan-cake system of winding explains this.

PFANSTIEHL ELECTRICAL LABORATORY

North Chicago. Illinois.

DISTRIBUTORS:

Beckley-Ralston Co., Chicago, Ill.
E. A. Featherstone Co., Los Angeles, Cal.
Minneapolis Electric Motor Company, Minneapolis, Minn.
Bi-Motor Equipment Co., Boston, Mass.

# WIRELESS AUTO-CONTACT BATTERY BOX

Uses ANY standard No. 6 Dry cell,
No wires, no binding posts,
All connection automatically made by closing the cover—4 or 8 cells.

Series or Multiple=series at your option.
"Shut the Lid = = = That's All!"

A. HALL BERRY, 97 Warren St., NEW YORK CITY

(8 Cell Box)

The "INNERSHU"

Positively Makes

MAKES TIRES LAST TWICE AS LONG

DOUBLES THE PLEASURE OF AUTOMOBILING

FOR SALE BY ALL DEALERS

INNER SHOE TIRE CO.

GRAND RAPIDS, MICHIGAN

# Graphlio

A powdered Flake Graphite absolutely free from grit, that will not clog up oil feed pipes or lubricators

Reduces friction, increases available horse power and assures cool bearings when used in lubricants.

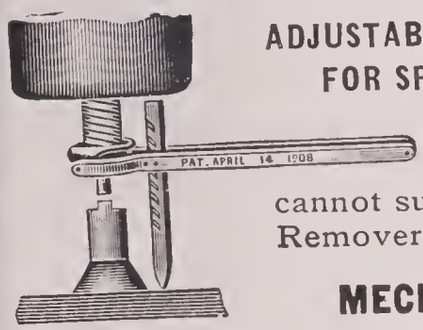
## Walter D. Carpenter Company

39 CORTLANDT STREET

GRAPHITE New York GREASES

# TRIUMPH ADJUSTABLE VALVE REMOVER

Does the work with no side strain or bending of valve stem.



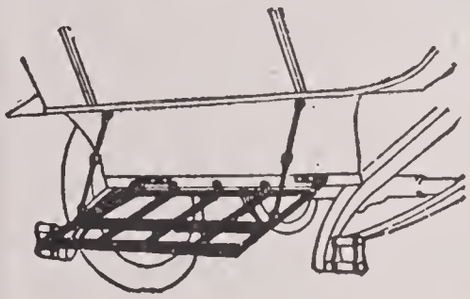

**ADJUSTABLE AND NON-ADJUSTABLE BALL JOINT FOR SPARK AND THROTTLE LEVERS, ETC.**

For sale by SUPPLY DEALERS throughout the United States, if your dealer cannot supply you send us P. O. order for $1.00 and the Remover will be sent to you, delivery charges prepaid

**MECHANICAL AND ELECTRICAL MFG. CO.**

(Rear) 2227 Prairie Ave., CHICAGO, ILL. Write for Catalogue No. 10

# DOUBLE-FOLD AUTO TRUNK RACK

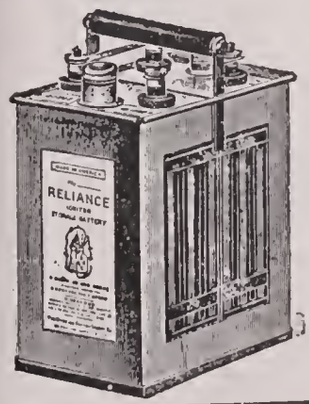


Made for service and in sizes to fit any car. Is made of light cold rolled steel, black enamel baked on. Will outlast and give better satisfaction than any Trunk Rack on the market today, in fact will outlast the car. The racks are made adjustable wherever possible and can be put on any car. They stand for efficiency, durability and reliability. If you want the best, most convenient and most substantial Trunk Rack on the market at a fair price write us. **Money refunded if not as represented.** Orders filled promptly.

**The Auto Blacksmith Shop**

Phone: Calumet 1685 1720 Michigan Ave. Chicago, Illinois

## The *RELIANCE* Igniter Storage Battery (Celluloid Jars)
## *RELIABLE* Igniter Storage Battery (Hard Rubber Jars)




**Also Motor Cycle Type in Celluloid or Rubber**

WE MAKE 44 STANDARD STYLES AND SIZES

Our 18th year in the manufacture of Storage Batteries and accessories of every kind. Write for catalogs of Dome Lamps, Hydrometers and other Specialties

**THE STORAGE BATTERY SUPPLY CO.**

237 and 239 East 27th Street :: :: NEW YORK

# THE GEISZLER

**Non-Sulphating**

## Storage Batteries

**Size 66, 6 Volts, 60 Amp. Hrs.**

PRICE

**$15.00**

Perfect satisfaction **Guaranteed** or money refunded any time within one year of date of purchase.

Superior to any other Storage Battery regardless of price.

# THE GEISZLER MIDGET

**Non-Sulphating**

## Storage Battery

**2 Volts, 30 Amp. Hrs.**

PRICE

**$2.50 Each**

Give more power and speed than dry cells, will hold their charge for months when not in use, can be recharged for 15 cents each, and will outlast three sets of dry cells on each recharge.

Same size as No. 6 Dry Cell

SEND FOR CATALOG

**GEISZLER BROS. STORAGE BATTERY CO.**

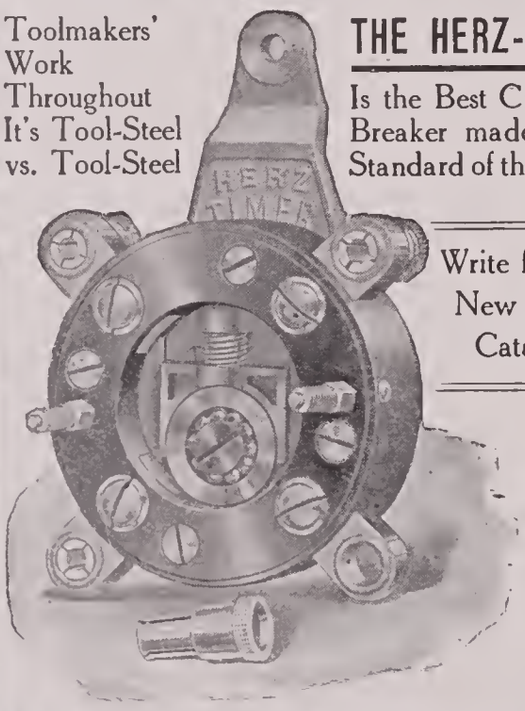
512 West 57th Street - - - NEW YORK CITY

# PERFECT TIMING!

Toolmakers' Work Throughout It's Tool-Steel vs. Tool-Steel

**THE HERZ-TIMER**

Is the Best Circuit-Breaker made—The Standard of the World




Write for Our New 1909 Catalog

**NEW—See the HERZ ROLLER TIMER**

Double Ball Bearings — Snap Connections
Large Roller on Balls — It's perfection

THE WONDERFUL NEW CONTACT

NEVER BURNS OFF
NEVER WEARS OFF

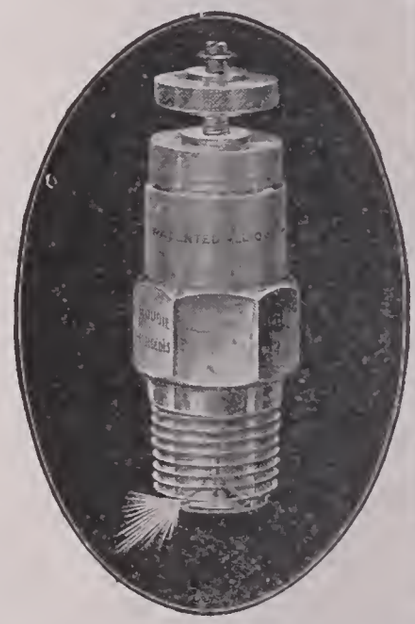
# IT NEVER FAILS!

WE GUARANTEE IT

## The HERZ-PLUG

**"BOUCIE MERCEDES"**

IS THE BEST AND MOST RELIABLE SPARK PLUG EVER MADE—The double-stone insulation alone lifts it sky-high above the best porcelain plug. Stone will **NEVER** crack; porcelain does. **The Herz-Plug** is proof against oil or soot; self-cleaning. Forms part of your motor, same as the pistons. Needs never to be taken out.



PRICE

**$1.50**

Standard or Magneto Types

**ASK YOUR DEALER**

**HERZ & CO., Civil Engineers, Cor. Lafayette & Houston Sts., NEW YORK**

# Important Subscription Notice

The two foremost publications in the motor industry—the CYCLE and AUTOMOBILE TRADE JOURNAL and MOTOR CYCLE, MOTOR BOAT and AUTOMOBILE TRADE DIRECTORY, may be subscribed for at the following prices—either singly or in combination

## CYCLE AND AUTOMOBILE TRADE JOURNAL

| | |
|---|---|
| One year | $2.00 |
| Two years | 3.00 |
| Five years | 5.00 |

## MOTOR CYCLE, MOTOR BOAT & AUTOMOBILE TRADE DIRECTORY

| | |
|---|---|
| One year | $1.00 |
| Two years | 2.00 |
| Five years | 4.00 |

**The combination of the two—Journal and Directory**

| | |
|---|---|
| One year | $2.50 |
| Two years | 4.00 |
| Five years | 7.50 |

These two publications are invaluable to anyone desiring accurate information regarding the motor industry. They cover the field in a thorough and comprehensive manner. Send for a sample copy of the Journal, which will be sent free if you mention this publication. Copies of the directory are fifty cents each.

*CHILTON PRINTING COMPANY*

Market and Forty-ninth Streets, PHILADELPHIA

## "Eveready" Dry Cells
The Battery of Quality

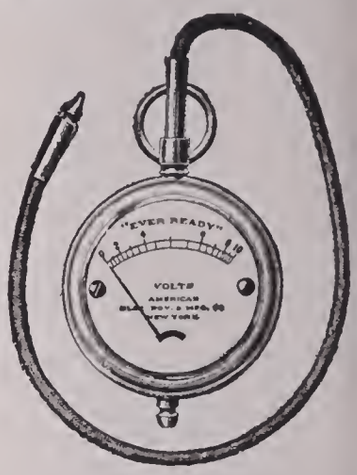
No. 406. Type "J"
2½ x 6 inches . . . . 25c
No. 407. Type "K"
3 x 7 inches . . . . 50c
No. 413. Type "L"
3½ x 8 inches . . . . 60c

## "EVEREADY" POCKET METERS (HAND CALIBRATED)

Size to fit the vest pocket. Without doubt the smallest, neatest, most accurate and most reliable pocket current meter.

No. 1002 Ammeter . . $3.00
0-30 Amperes
No. 1003 Volt-ammeter 4.00
0-30 Amperes, 0-14 Volts
No. 1005 Volt-meter . . 3.00
0-10 Volts

Each instrument in a chamois leather case.




No. 1002 Ammeter

## "Eveready" Bull Dog Battery Connectors

They never let go.

Eliminate all ignition troubles caused by loose battery connections.

BEWARE
of worthless infringements.

Price, per box of 10 . . . 60c

**AMERICAN EVER READY COMPANY, 184 LAKE STREET, CHICAGO, ILLINOIS**



*THE SUN SHINES IN GOOD WEATHER*

# Blue Ribbon Auto Cream

SHINES ALL THE TIME

—Sold by—
Jobbers and Dealers
Everywhere

THE 20th CENTURY
## METAL POLISH

REMOVES TARNISH INSTANTLY
DOES NOT SETTLE. LEAVES NO
POWDER OR SEDIMENT

**It Is There With the Shine in Quick Time**

**SEND 10 CENTS FOR TRIAL CAN**

**INTERNATIONAL METAL POLISH COMPANY**
**Indianapolis, Indiana**

# POLARINE OIL

PERFECT LUBRICATION OF ALL TYPES OF AUTOMOBILES. ALSO ADAPTED FOR MOTOR BOAT LUBRICATION

## A CARBON AND FROST PROOF OIL

LOW CONSUMPTION—PERFECT SATISFACTION—SURE LUBRICATION

SOME OF THE CHARACTERISTICS THAT MAKE POLARINE OIL BEST SUITED FOR ALL TYPES OF GASOLINE ENGINES USED IN AUTOMOBILES AND MOTOR BOATS

## MEDIUM POLARINE OIL

Was used on FORD CAR No. 2, winner of the New York-Seattle race, over entire route.

## TRANSMISSION LUBRICANTS

POLARINE GREASE

FOR DIFFERENTIALS, AXLES, BALL AND ROLLER BEARINGS, UNIVERSAL JOINTS, ETC.

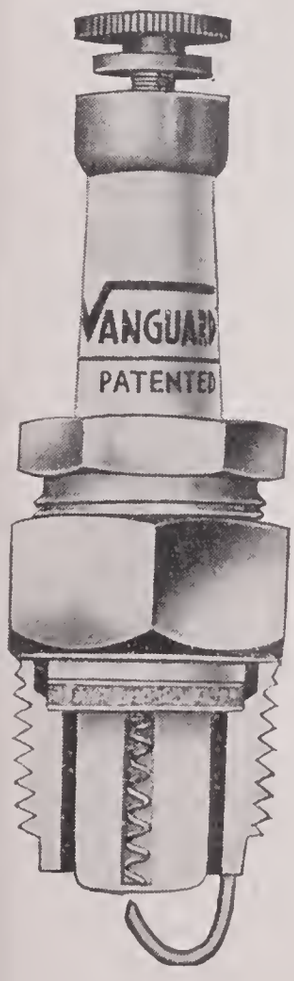
POLARINE TRANSMISSION LUBRICANTS "A" AND "B"

SEMI-FLUID OILS OF GREAT ENDURANCE—OF CUSHIONING PROPERTIES—FOR THE LUBRICATION OF TRANSMISSIONS

If your dealer cannot supply you, address

## STANDARD OIL COMPANY

## MOTOR TROUBLES




come to all who do not use the kind of Spark Plugs that will work under all engine conditions, regardless of dirt and moisture. In

**VANGUARD SPARK PLUGS**

the central firing pin or point has been eliminated and the spark is forced to a connection with spiral platinum wire encased in porcelain through a microscopic aperture that does not permit even air to enter.

Look for the Trade Mark.

TRADE MARK

VANGUARD

REGISTERED

It means perfect goods and fair prices.

The absence of firing pin or point causes greater resistance with a hotter spark that means more power, and however sooty the plug may become, a clean circular spot is found where closing of circuit is forced. Let the VANGUARD Spark Plug demonstrate its efficiency.

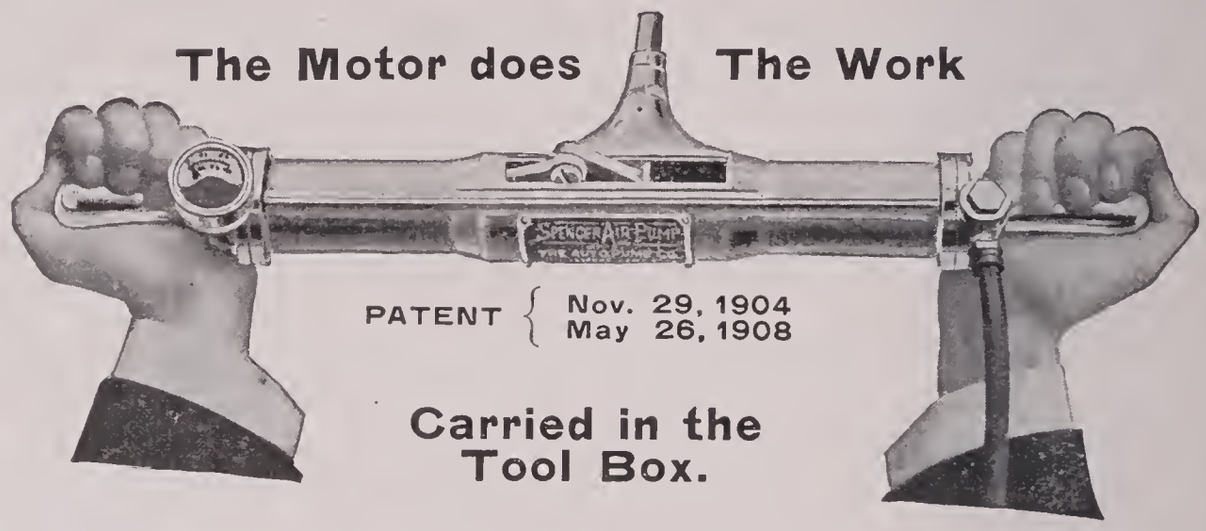
**Standard ½-inch and metric thread $1.**
**A. L. A. M. $1.25. Sent postpaid on receipt of price.**

**VANGUARD MANUFACTURING COMPANY**
**JOLIET, ILLINOIS**
Manufacturers of the famous Vanguard Wind Shields

OUR LINE FOR 1909-1910

# The Spencer Power Air Pumps

**The Motor does The Work**

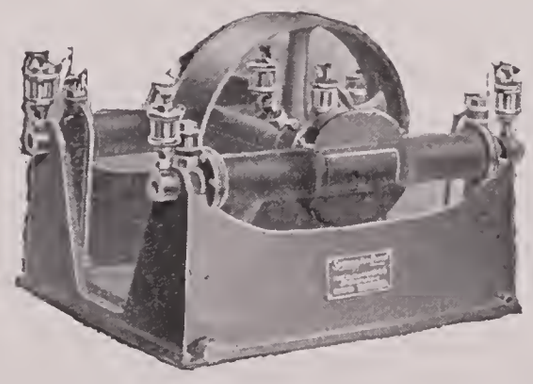



PATENT { Nov. 29, 1904
May 26, 1908

**Carried in the Tool Box.**

**This Pump** is built like a high-grade engine, cylinder, pistons and piston rings, ground to the thousandth part of an inch. There are no leather packings to dry or wear out. It will inflate your tire in two minutes, saving time and labor. It will increase the life of your tires by keeping them properly inflated.

**MADE IN FIVE SIZES.**



Our four cylinder **Garage Pump** is made up of drop forged pistons and cranks and equipped with piston rings.

It will give a high pressure and large volume, and will do the work of a pump costing twice the money.

ASK FOR CATALOGUE AND PRICES

# THE AUTO PUMP CO.,

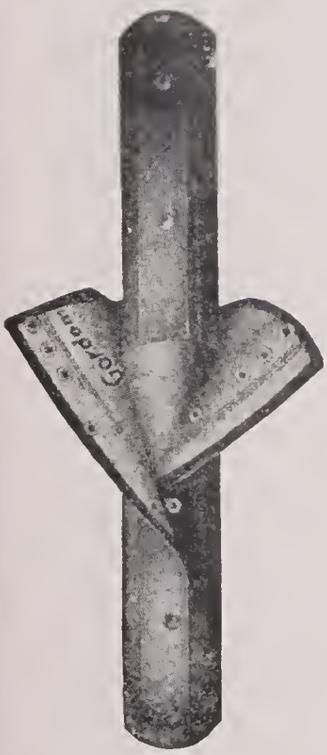
SPRINGVILLE, N. Y.

# GORDON TOP HOOD

Fits Neat
and Smooth

Keeps Top Clean

# GORDON NEW ENGLAND TIRE COVER




Buttons on the tread of the tire—don't scratch polished surface : : :

CATALOGUE FREE

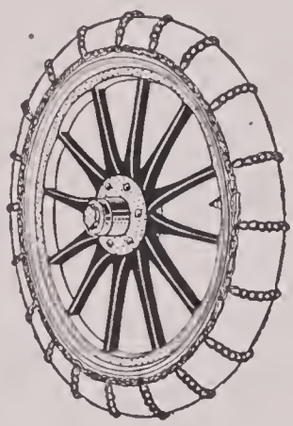
## The Vehicle Apron & Hood Co.

COLUMBUS, OHIO

# IT MAY RAIN TO-DAY

or to-morrow or next day. Then you'll need Weed Chain Tire Grips. And you'll need them badly. There is only one way that you can be positively sure that your car is not going to skid off the road, and that is — by using

# Weed Chain Tire Grips



Weed Chains are easily attached or removed. They are in use only when you need them. They occupy but little space in the tool box. The new Weed cross chains are BRASS PLATED — see that you get them.

## Weed Chain Department
## United Manufacturers, Inc.

**76th Street and Broadway** **New York**

*THE WELL-KNOWN*

# GILBERT TIRE CASES

Need no recommend — ask the man who uses one

Manufacturers of

Gilbert Tire Covers
Gilbert Tire Sleeves
Gilbert Spark Plug Cases
Gilbert Rubber Covers
Gilbert Over Rail Boots
Gilbert Tool Rolls
Gilbert Tire Irons

## Gilbert Manufacturing Company

New Haven, Conn.

(*Trade Mark Registered*)

For Cleaning Automobiles Carriages

# GREEN OIL SOAP

Varnished Surfaces and Harness

**is the highest grade**

# GREEN OIL AUTO SOAP

(TRADE MARK REGISTERED)

**Does not injure the varnish, paint or leather. Quickly removes grease, stains and dirt from autos, leather, clothing, hands, etc., without the least injury. Does not necessitate an additional application of a finishing polish to restore the lustre to the auto body. This soap has been tested on a highly polished wood panel 1350 times and the polish and finish is still perfect.**

**MONAHAN ANTISEPTIC COMPANY,**

**92 Market Street, Chicago.**

**Sole Manufacturers** **Telephone Main 277**

# SHALER

ELECTRIC VULCANIZERS

**KEEP**

UP YOUR TIRES | DOWN YOUR EXPENSES

There is nothing that will so add to the comfort of a tour, as the knowledge that you have nothing to fear through punctures and blow-outs.

A SHALER will keep your tires in perfect condition and appearance.

**A. C. SHALER CO., WAUPUN, WIS.**

---

Est. 1884 Inc. 1902

# The Illinois Carriage Lamp Co.

Repairers of all styles of

**Auto Lamps, Horns and Generators**

Telephone—North 816

81 Illinois Street - CHICAGO

---

WE CARRY

the largest and most select grades of

# SPONGES AND CHAMOIS

FOR

**Auto and Carriage washing**

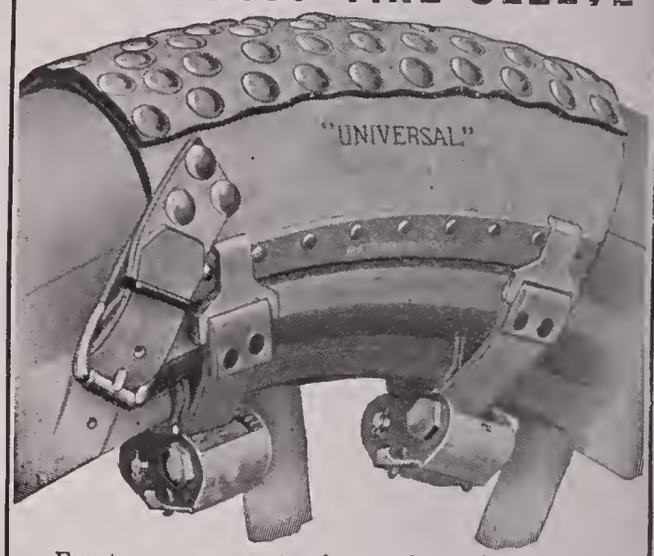
Our goods are especially selected for durability

---

## "UNIVERSAL"
## DETACHABLE FULL TREAD
(IMPROVED)

The full tread protector with an adjustable tension anchorage. Unlimited tension and adjustment. A positive non-detachable anchorage, which eliminates all possibility of tire injury from friction or abrasion. Special steel stud rivet traction armor, with protecting armor all the way over, affording positive traction, absolutely non-skid and puncture proof. A safe and sane tire protector for all possible road conditions. **Write for descriptive circular and prices.**

## "UNIVERSAL"
## EMERGENCY TIRE SLEEVE




For temporary protection and repair. Ratchet tension anchorage. Instantly adjusted. It is placed or removed in a "jiffy." No lacing. No tools, but the little wrench. The "Universal" sleeve is guaranteed to bring you in on 4 wheels in any case of tire injury from a scratch to a blow-out. Saves you time, saves your temper, saves your tires.

**Write for descriptive circulars and prices to dealers.**

**MOTOR CAR SUPPLY CO.**
Chicago Agents.
**UNIVERSAL TIRE PROTECTOR CO.**
Angola, Ind., U. S. A.

# HAVOLINE OIL

## (FOR LUBRICATION)

## *"It Makes a Difference"*

Havoline Oil has a high fire test and just the right amount of body. It is filtered free from all carbon producing impurities.

It is the best gas engine oil made.

## HAVOLINE OIL COMPANY

NEW YORK OFFICES: 80 BROAD ST. and 1905 BROADWAY

CHICAGO: 40 Dearborn St.
BOSTON: 749 Boylston St.
ST. LOUIS: 4630 Olive St.

Pacific Coast Agents:
W. P. FULLER & CO.
San Francisco, Cal.

HAVOLINE MOTOR OILS

# H. C. KNIGHT & CO.

MANUFACTURERS

## THE KNIGHT AUTO SHIELD

BUMPERS
ROBE RAILS
FOOT RAILS
TIRE HOLDERS
MIRRORS
AND OTHER
ACCESSORIES

TELEPHONE CALUMET 2482

**1725 Michigan Ave., Chicago**

# PANHARD OIL

***"The Oil in the Checkerboard CAN"***

will prove to you by a test on your own car that it pays to be careful in the selection of cylinder oil and other lubricants. Thorough lubrication and freedom from carbon at the same time are results worth trying for.

DON'T ECONOMIZE ON YOUR OIL—it is poor economy. Poor cylinder oil will increase your repair bills far more than the slight saving in price originally.

WE CANNOT MAINTAIN Panhard quality and compete with cheap prices and we will NOT lower the quality. You will thank us for it in the long run.

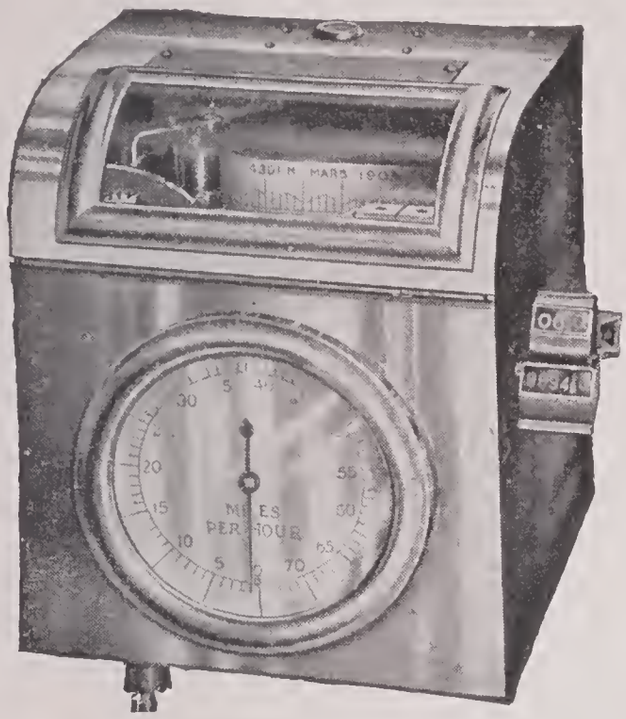
PANHARD OIL has set the standard by which other cylinder oils are judged. Why not get the best? Send for our booklet, "Lubrication."

## GEORGE A. HAWS

**73 PINE STREET** **NEW YORK CITY**

Every owner of an Automobile needs a

# Recometre




***Because:*** It gives a plain and permanent record of his car; it tells how far the car goes; it tells how fast it goes; it tells when it stops and how long it stops.

***Because:*** This record can be referred to at any time and is absolute proof of the speed of your car. It is better than a watchman in keeping your car from unauthorized use.

THE ONLY INSTRUMENT THAT TELLS AND TELLS TRUELY EVERY MOVEMENT OF AN AUTOMOBILE—ALL THE TIME :: :: WORKING EVERY MINUTE—DAY AND NIGHT

*Each Recometre Combines*

A Record
A Speedometer
A Clock
A Calendar
A Mile Meter
A Trip Meter

*Six Distinct Devices in One*

**Price,** Style "A" for Automobiles **$100.00**

## Chicago Recometre Company

1251 MICHIGAN AVENUE :: :: CHICAGO

EQUIP YOUR CARS WITH

# HEALY RIMS

(DEMOUNTABLE TYPE)

Fits any tire and enables that tire to be changed in three minutes.

Spare tires carried inflated on extra rims at the side of the car.
Healy Rims fitted to any wheel in one day.

PRICE MODERATE

## HEALY LEATHER TIRE CO.

90 Gold Street - - New York City

CHICAGO AGENCY:

The Motor Car Supply Co. - 1451 Michigan Avenue

# The SQUEAK DEVILS' finish

# Mexican Graphite

# Automobile Lubricants

Reduce friction, smooth out kinks and stop squeaks. Put new life into old machines; give smoother, greater power to new ones.

## Minimize Wear and Save Repairs

### by Using Only

**U. S. G. Co's Grafita** for sprockets and chains
**U. S. G. Co's Graphite Auto Lubricant** for general lubrication
**U. S. G. Co's Graphited Wood Grease, No. 360,** for enclosed gears
**U. S. G. Co's No. 205 Lubricating Graphite** mixed with oils and greases

These lubricants carry just the correct proportion of pure soft Air Floated Lubricating Graphite---not "flake" graphite but **powdered** graphite of impalpable fineness, **absolutely free from grit** and of such a peculiarly adhesive nature as to cause it to "stay put" (something that "flake" graphite will not do) on that part of the bearing with which it comes in contact.

**THE UNITED STATES GRAPHITE CO.**
GENERAL OFFICES AND FACTORY, SAGINAW, MICHIGAN, U. S. A.

Branch Offices: New York, Philadelphia, Pittsburg, Chicago, Denver, Seattle

# The "Exide" Sparking Battery

It Stands in a Class by Itself

It is made by a manufacturer having 20 years' experience in battery making

The great Steam and Electric Railways, Central Lighting and Power Stations, Telegraph, Telephone, Fire Alarm and Signal Companies use batteries made by this Company. This is a safe guide—Specify the

"Exide"

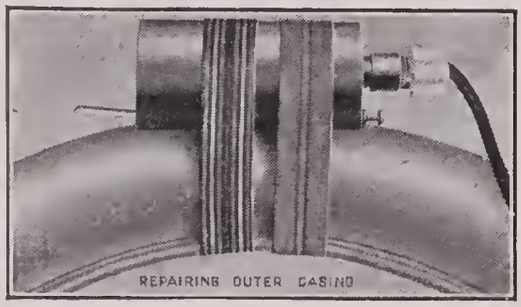
## The Electric Storage Battery Co.

1888 PHILADELPHIA 1909

SALES OFFICES

New York Boston Chicago St. Louis Cleveland Atlanta San Francisco Toronto

"Chloride Accumulator" "Tudor Accumulator" "Exide Accumulator"




## PREPARE FOR EMERGENCIES ON THE ROAD

Buy a Buffalo Electric Vulcanizer and

**REPAIR YOUR OWN TIRES**

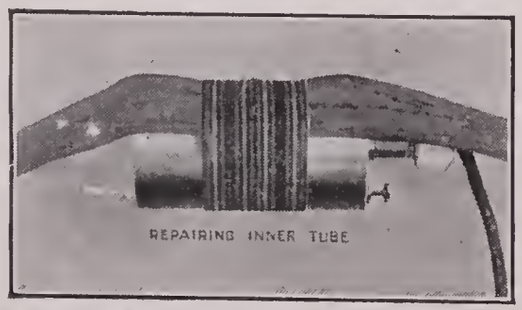
outer casing or inner tube—for a few cents at night for next day's touring. Don't go to repair shop.

**SAVE TIME, SAVE MONEY, SAVE PATIENCE**

Our introductory price will surprise you. Write today for "Tire Troubles."

**Buffalo Electric Vulcanizer Co.**

822 Erie County Bank Building BUFFALO, N. Y.



One of Our 25 Different Styles

Largest Manufacturers of

**AUTO TRUNKS, LUGGAGE CARRIERS**

**Covers, Fabric Goods of Every Description**

Write for our "1909" Catalogue and Price List

**AJAX TRUNK AND SAMPLE CASE CO.**

91-93 Mercer St., NEW YORK

CHICAGO REPRESENTATIVES

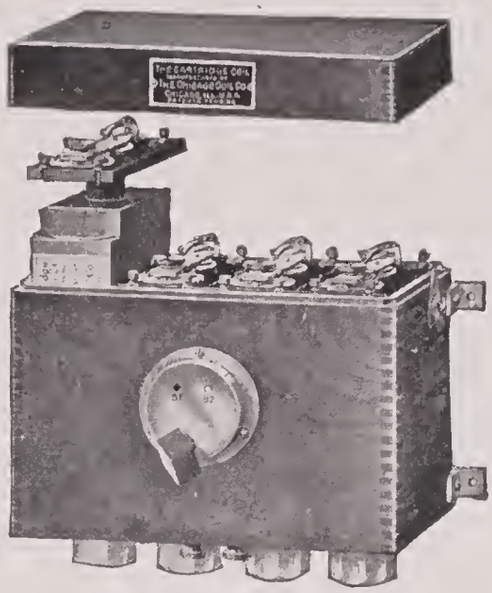
**HEINEMAN AND HENSLEY**

1461 Michigan Ave.

# Cartridge Coils

This coil is so made that you can replace any part in a few seconds' time.

No units to throw away. Economical on current. Has the switch with a memory which saves platinum wear and is in every way a superior article.



1 Cylinder, $10.00
2 Cylinders, 20.00
3 Cylinders, 30.00
4 Cylinders, 40.00
6 Cylinders, 60.00

Parts are standard and interchangeable

GUARANTEED FOR ONE YEAR

## Cartridge Coil Company, LAFAYETTE, INDIANA

Motor Car Supply Co. Chicago
Chicago Vulcanizing Co., Chicago
Standard Auto Supply Co., Chicago

# FISK QUALITY

## Adds to Your Touring Comforts

We make tires to fit any rim and maintain Branches in seventeen principal cities in the United States

BOLTED-ON CLINCHER Q. D. CLINCHER

REMOVABLE RIMS

Phone, Wire, Write or Call at

## THE FISK RUBBER COMPANY

Boston, Springfield, Philadelphia, Minneapolis, Kansas City, Seattle, Chicago, Atlanta, Cleveland, St. Paul, Denver, San Francisco, New York, Buffalo, Detroit, St. Louis, Los Angeles

Factory: Chicopee Falls, Mass.

# SULLIVANOIL

IS A TRIPLE FILTERED, HIGHLY REFINED PETROLEUM LUBRICANT

*Absolutely Free from Carbon, Dirt, Grit, Gum, Acid, Etc.*

GUARANTEED
TO GIVE
PERFECT LUBRICATION
ON ANY
GASOLINE ENGINE

Sullivanoil Company, Chicago

# SULLIVANOIL

# *PUMPELLY BATTERIES*

## ARE THE BEST

FOR

SPARKING, LIGHTING AND PROPELLING THE AUTOMOBILE

6 volt, 60 ampere hours, guaranteed to run car over 2,000 miles on one charge if spark coil is properly adjusted.

¶We manufacture them in all sizes and capacities. We renew any make and size Storage Battery.

WE USE NO WOODEN SEPARATORS

WRITE FOR PRICES

PUMPELLY BATTERY CO.
1202 to 1212 E. 22d Street
Indianapolis, Indiana

*534 Pages*

OUR

# CATALOGUE

IS AN

ENCYCLOPAEDIA OF
**AUTOMOBILE SUPPLIES**

## We Have the Goods

Wire or write when in a hurry.

We will give you what you want when you want it.

---

## Largest Auto Supply House in the World

---

## *Motor Car Supply Co.*

G. S. CHAPIN, M. D., President

*1451-1453-1455 Michigan Boulevard, CHICAGO*

# In Actual Brake Tests this Plug has shown Greater Horse Power than any other

## John B. Anderson, M. D.

01809 Division Street, Spokane, Wash.
May 27, 1909.

The National Steel Products Co.,
Cleveland, Ohio.

Gentlemen:

Enclosed please find my check in the sum of Eight Dollars for which send me four spark plugs. I have tried plugs of several different makes. Yours is the best ever. I have a set that I have used in my Ford Model N Car **for a year.** Yesterday I went for a seventy mile run, and as one of my plugs is in poor condition, the mica being broken, I purchased a new plug said to be soot proof and to spark in oil and water. I made the run of thirty-five miles with the engine being erratic after the first few miles, and as I was loosing power on the hills I examined the plugs, found the New Plug as black as soot itself, and the other three plugs all with a sparking surface. I brushed them off with a stiff brush, and put in my old dilapidated plug and made the other thirty-five miles without mishap. **I do not give a D— whether a plug will spark in oil and water. I want one that will spark in the cylinder, and permit me to say that your plug will do it.** I think that you will make the other fellows sit up and take notice. I tell you this now, as post mortem roses have their beauty lost to the fellow most interested.

Yours very truly,

JNO. B. ANDERSON.

**We are supplying a number of the largest automobile manufacturers, who have previously contracted for other plugs, with our Spiral Core, Blue Blaze and Rapid Fire Plugs, for 1909 use, they having discontinued other plugs because of better results from ours.**

# Horse Power

THE LIBRARY OF CONGRESS

THE LIBRARY OF CONGRESS

LIBRARY OF CONGRESS
0 038 701 697 1